

Problem & background

Problem:

The COVID-19 pandemic has led to a surge in cases and deaths, making it difficult to track the spread of the virus. There is a need for an effective data analysis system to collect, process, and analyze the data to assess its impact on the population and guide decision-making.

Background:

Various organizations have developed COVID-19 dashboards to visualize the data and make it easier to understand. However, many of these dashboards lack advanced analytics or predictive modeling capabilities. An effective COVID-19 data analysis dashboard can provide decision-makers with a comprehensive understanding of the pandemic's impact, guide resource allocation, and help researchers identify patterns and trends to manage the pandemic.

Solution

To address the challenges of monitoring and managing the spread of COVID-19, I have developed an Excel dashboard for COVID-19 data analysis. This dashboard provides a comprehensive view of the pandemic's impact by visualizing data on the number of cases, deaths, and recoveries across countries and regions. It allows users to track the spread of the virus over time and compare the performance of different countries in managing the pandemic.

Methodology & Project Scope

- To develop the COVID-19 data analysis dashboard, I used Excel's built-in data analysis tools, including pivot tables and charts.
- First, I created a new column to improve the data's understanding and ensure accuracy.
- Then, I analyzed the data by creating several pivot tables to summarize and compare the data on a global and regional level.
- The pivot tables were then used to create graphs to visualize the data more effectively.
- Additionally, to analyze the COVID-19 data continent-wise, I included a slicer that allows users to filter the data by continent.

The scope of this project is to develop a user-friendly and effective COVID-19 data analysis dashboard that provides accurate information on the pandemic's impact globally and regionally.

Goals

The main goals of this project are to develop an effective COVID-19 data analysis dashboard that provides users with accurate information on the pandemic's impact and enables them to make informed decisions.

Concepts Used

- **Concept 1:** Pivot tables: Pivot tables are a powerful tool in Excel that allow users to summarize and analyze large datasets.
- **Concept 1:** Charts and graphs: Charts and graphs are effective tools for visualizing data and communicating insights. We used various types of charts and graphs, including column chart, bar charts, and maps, to display COVID-19 data trends and patterns.
- **Concept 1:** VLOOKUP function: The VLOOKUP function is a useful Excel formula that allows users to look up data in a table and return a corresponding value.

Conclusion

Overall, the COVID-19 data analysis dashboard provides a powerful tool for managing the pandemic and making informed decisions. It enables policymakers, healthcare providers, researchers, and the general public to access reliable and accurate data and insights, and to take appropriate actions to contain the spread of the virus. The project's mission is to continue to improve the dashboard's functionality and effectiveness, and to support the global efforts to overcome this pandemic.

Project Owner

Name: Sandeep Solanki

Date: 08/03/2023