Covid-19 Global Data Analysis Report – Actionable Insights

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Business Context

This project was designed keeping in mind the questions which have become a norm in the past few years due to the advent of Corona Virus. The goal here was to generate actionable insights regarding the virus – its spread, reach, impact and its aftermath. These insights can be molded and used by individuals, government entities, business organizations to direct their effort in the direction where they might bore the maximum results on investments during the pandemic times and years to come along.

Problem Statement

The uncertainty during the core pandemic years highlighted the lack of actionable insights that was available with businesses especially the ones which were at larger risk due to downward shift of the economy – for reasons like lockdowns, companies going out of business etc. To tackle such a problem, I tried to generate meaningful insights which can help business prepare themselves ahead of time to foresee such occurrences and maybe pivot in the direction which is not only stable but possible filled with growth opportunities even during the uncertain times.

Solution Developed

Google provides open datasets on a vast array of topics and interests. One such open dataset hosted by google is home to Covid-19 related information. This information ranges from country to states and even goes up to districts /county levels to provide a myriad set of information. I utilized the BigQuery – Data Warehousing platform on Google Open Cloud to harness my skills with SQL to make sense out of this humongous dataset. Several questions were asked, and I possibly left out on many which could be asked *(as this dataset is huge and asking the right questions is an art which I am getting better at with time)*. But the demo which I have provided will give you a sense of the scale at which this solution can be leveraged to generate key insights for government entities, businesses, research and individuals.

Improvements to the solution

As I mentioned that many of the questions might have been skipped due my lack of exposure but diving deep into the data with the right guidance can open so many doors and many critical ideas which can result in new dimension of questions can be explored. The work on this analytical project isn't over and new improvements in technology and medicine pop up every day. Such info can be amalgamated with this dataset in future.

Link to the demo

Dataset Source - https://cloud.google.com/datasets

Blog post - https://datawithraghav.blogspot.com/2022/07/bigquerycovid19globaldataset.html

SQL Queries - https://github.com/Ragishan/covid19_DA_Queries