**Career Development Criteria Self Marketing**

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MIS5432: Business Intelligence and Data Analytics

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**Analysis of the Distribution and Efficacy of the Pfizer COVID-19 Vaccine and Predictions of the Vaccination Rate for 2021**

This week's assignment submission the project chosen for submission is the capstone Project of MIS581 on the CDC-Pfizer vaccine. This research analyzes the distribution and efficacy of the Pfizer COVID-19 vaccine-based and the number of residents who took the two shots. Also, predictions will determine the likelihood of achieving one hundred sixty million fully vaccinations or vaccinating 70% of the adult population with at least one shot by July the 4th. The dataset's potential is updated on real-time conditions, and it aims to describe the number of vaccinations and the vaccine hesitance and herd immunity in the U.S.

**Description of the project**

This project chose this project because the COVID-19 pandemic threatened the world and caused many deaths since 2019. All pharmaceutical companies and scientific researchers have worked together to fight the disease. Countless healthcare workers, scientists, medical researchers, experts, and public health officials are on the front lines helping patients, exploring therapies, teaching the public, and assisting in setting safety standards. According to Dr. Fauci (CNN, 2021), the safest method to return a life resembling normality is vaccinating everyone. Pfizer’s COVID-19 vaccine dataset is organized and reliable; hence, it can be leveraged into analysis and used for CDC and vaccination goal predictions at the state level and market research studies.

**The Reason of choosing this project to upload.**

The project can help and contribute by showing potential Pfizer-vaccine datasets is supported by state and local news as an outreach effort to improve their state officials’ confidence in predicting hesitancy rates in their jurisdictions getting the vaccine. In addition, this dataset encourages more people to get the vaccine and forecast vaccine hesitance. The significance of immune on COVID-19 vaccine is estimated by determining the risk of disease with vaccinated and unvaccinated people and then discovering how the disease decrease risk percentage correlates among the two groups. The equation to the calculation is the risk of getting sick with the unvaccinated (placebo) group minus the risk with the vaccinated group, over the risk among unvaccinated groups.

**Explanation of the output of your project**

According to Jeff Zients, the White House coronavirus coordinator, the U.S. will miss President Biden’s initial goal of vaccinating at least one dose of shot vaccine to 70 percent of adults by July 4. To achieve the goal stated by the president age 27 and above of American and between age 18 and 26 ensuring to receive at least one shot through the July 04 holidays weekend. According to the briefing data, the young adult age groups are projected hesitancy against the COVID-19 vaccine (Diamond, 2021). By mid-July, the new goal is to vaccinate the 160 million Americans fully vaccinated; currently, 150 million Americans are fully vaccinated, and 65% of them are taken at least one shot.

Measles is an excellent case Measles a highly spreading infectious disease for which the CDC has highly effective vaccines. Experts say if 93-95% of the community is immune to measles, a likely purpose with the available vaccine will preserve the whole society. Herd immunity works as a wall upon the virus, with the immune people developing the potential chain of carrying, so those exposed groups are unlikely to get it (WHO, 2014). Experts advised that to have herd immunity as a nation, 80-90% of the people must have COVID-19 immunity, either through prior infection or vaccination. That is why the CDC is urging the citizens to get the COVID-19 vaccine. The percentages express the vaccines’ effectiveness. This vaccine is profoundly effective and particularly efficient at preventing hospitalizations and deaths. As many states reported in the U.S. hospitals through January–March 2021, taking of Pfizer-BioNTech or Moderna COVID-19 vaccines was 94% effective against COVID-19 hospitalization with fully vaccinated adults and 64% effective among partially vaccinated adults aged ≥65 years.

**Description of the future use of the project.**

The potential Pfizer-vaccine dataset is supported by state and local news as an outreach effort to improve their state officials’ confidence in predicting hesitancy rates in their jurisdictions getting the vaccine. This dataset will encourage more people to get the vaccine and forecast vaccine hesitance. The significance of immune on COVID-19 vaccine is estimated by determining the risk of disease with vaccinated and unvaccinated people and then discovering how the disease decrease risk percentage correlates among the two groups. The equation to the calculation is the risk of getting sick with the unvaccinated (placebo) group minus the risk with the vaccinated group, over the risk among unvaccinated groups.

**GitHub Advantage and Disadvantage**

Github is a repository hosting service and has a web-based graphical interface (Novoseltseva, 2018). The benefits of GitHub access controls and essential task management the project handled by the individual. GitHub manager project code from different programming languages and keeps track of the various updates perform and keeps trace of the different modifications made to every iteration. GitHub makes private containers, but this is not necessarily ideal for many. For example, for intellectual property, Users can place all of this in support of GitHub. Anyone who has a login, like many situations, has had security breaches before and is constantly targeted. So, it is often better than nothing, but it is not perfect. In addition, some clients/employers will only allow code on their own secure internal Git as a matter of policy.

**Conclusion**

The Pfizer-vaccine dataset is supported by state and local news as an outreach effort to improve their state officials’ confidence in predicting hesitancy rates in their jurisdictions getting the vaccine. The result will encourage more people to get the vaccine and forecast vaccine hesitance. The significance of immune on COVID-19 vaccine is estimated by determining the risk of disease with vaccinated and unvaccinated people and then discovering how the disease decrease risk percentage correlates among the two groups. The minimum amount of required population needed will be 70 percent of the people must be fully vaccinated all over the U.S.A.

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