There's one graph that has to do with the Covid-19 that blows my mind. It looks like this This graph shows Covid-19 cases in Indonesia. Do you see what happens here? It was started with small amount of cases, some-times plateaus for a little bit and then skyrockets. This is shocking to me because Indonesia is perhaps one of the most prepared country on earth for this pandemic.

The Indonesia government has an actual playbook that tells us what we need to do in the case of a pandemic, and yet you look at this graph and you wonder, what happened?

I want to piece together a timeline to find out how this happened. How does Indonesia with preparation before Covid-19 entered and literal pandemic playbook like covid testing, PSBB, PPKM, and vaccination program, end up with so many cases, and end with a graph that looks like this?

My name is hendrik, in the next 6 minutes we're going to go deeper in this case

I figured our timeline would start somewhere in March of 2020. But, we will go straight to the April of 2020 where the government put their first action. It's called PSBB or as we known as Large scale social restriction.

 Here, I present you the graph of Covid-19 cases with PSBB history and national holidays. Several national

holidays could lead to a spike in the cumulative number of daily and weekly covid-19 cases.

Referring to the Idul Fitri holiday from May 22 to 25 as an example, within 10 to 14 days after Idul Firtri, the cumulative number of daily and weekly covid-19 cases has increased 60 to 90 percent over regular infection rates. Within 10 to 14 days after the long weekend from Aug 20 to 23 the cumulative number of daily cases increased 50 to 100 percent.

And the last, the skyrockets cases was happened in January 2021, it was the end of the long holiday where the homecoming mobility was high from Dec 2020 to Jan 2021, with the high mobility happened in a few days, the high covid-19 test was held. Here, At the Table of testing for covid-19 in PSBB history, the highest Covid-19 test was held in January 2021 meaning that there're high mobility from the end of the long holiday, like if you want to use train, then you need to test, if you want to go to another provinces or islands by plane, you need to test. And that's why I said that there're high mobility.

I have a riddle for you, You look forward to it every year to enjoy your food , your life like vacation with your friends or your family. What is that? The answer is holidays. Holidays can make it happen.

Data from the last 10 months have shown a spike in

covid-19 cases after extended holiday periods. We've already experienced those long holiday periods. All of those holiday periods resulted in a 50 to 100 percent increase in Covid-19 cases after the holiday break.

Which is why the government properly organized the new playbook as to learn our lesson from the previous experiences, it's called PPKM or as we known as Community Restrictions.

We can see that, because of the holiday periods, there are high mobility that increase cases. In that case, PPKM was born to restrict the mobility.

Let's take a look at the graph. PPKM and Vaccination Program were started in January 2021. The graph shows that daily covid-19 cases decreased in the middle of PPKM and vaccination program with a pretty good number of cases, even in the middle of national holidays and long-weekend, the covid-19 cases were stable in 5 to 6000 daily cases from February to May.

Here, we can see that there's PPKM level 4 in the history. Then, What makes PPKM level 4 different than the normal PPKM? PPKM level 4 aims to limit the mobility to suppress the transmission of COVID-19. Because of the delta variant which is more contagious than the normal covid-19, government put more restriction to the mobility of the community and

A reminder that with all of these steps, the testing for a covid-19 was not a new idea. This is in the old playbook. Testing and surveillance of where the virus, is like a fundamental step in responding to a pandemic. That's why we can see that, as the high cases appear, the high testing for covid-19 was done. Because, It is used to track covid-19 and prevent the source. At that time, the source of delta variant was in Java and Bali, that is why those 2 islands were implemented PPKM level4.

Ok, so, we now feel like we have a much better understanding of why our graph looks like this, sometimes it goes up, goes down, and skyrockets. It has a little bit to do with the mobility.

Mobility is a factor of high cases of Covid-19 in PSBB history, meanwhile PPKM limit the mobility between provinces, the cases was decreased and you know what? With PPKM Level 4 to counter delta variant, we could say that its pretty succeed to prevent the bigger wave of Covid-19 Delta variant.

Holidays and long weekend have been proven cause for a spike in confirmed cases in PSBB history. So, I would recommend to make an action to put more focus on the mobility between provinces and islands. Maybe you have a question, Do you have any other evidence?

Back to the fundamental of the virus. The covid-19 virus spreads mainly between people in close contact each other. It spreads most easily in crowed settings. This is because as a person infected like their breaths, talks, or sneezes, liquid particles of various sizes are expelled into the air. To put it simply, if there're high mobility then the virus can spread easily, if there's no high mobility, how can the virus spread?

So, I hope, with my analyze I could give more impact to government in making a decision to fight covid-19 to put more attention to the mobility. We're talking about the Indonesian mobility behavior with many national holidays, so that's why we need to put more focus on the mobility. Because, If we wait from bad to worse than delta variant which is more contagious than the other covid-19, it will be too late to recover.
Ok, that's the end of my showcase of my project. And next

here's my learning takeaways
When I'm looking at this project. One first thing I've learned is that the ability to see the big picture of the project and focus on particular details when needed deserves in my analyze. I mean, there're many factors that could triggered the high cases of covid-19. But, instead to think for a big picture and put them all, I finished the projects by focusing on particular details I needed in my analyze using Google data studio and spreadsheet.

And then, there're a few interactive components of the learning process in generasi gigih to finished this project, mostly softskills for a data analyst like

Higher order thinking which requires something with the fact. This is benefit to me to organize that relate the big picture and the main concepts to be covered

Analysis reports that helped me to string up my presentation,

And last, critical thinking with minimze bias in data analyze, so that make me finished the project and make a well-prepared presentation for you guys

Thank you so much everyone for being such a wonderful audience throughout my session. Once again, thank you

Why do goverment didn't improve the health system, so at least we could prevent the chaos in hospitals? It's mind-blowing, that because you can't get the federal government to improve the testing because they just want to say "How great it is"