Task 3

1. I would link the time when the executives buy and sell the shares in the company they work for with
   1. The share prices/trading volume at time
   2. Any news article around that period to see its sentiment
   3. Earning call meeting notes
   4. Company and competitors’ revenue, profit, growth
   5. Sector’s performance.

After doing this analysis, I would then see if the market share were taken by the competitors, or the competitors are losing market share. Then also see the vertical chain related this company (e.g., airline industry is related to tourism, energy industry) carry out similar analysis in these industries. And put in appropriate positions depending on the outcome of the research.

**Challenges**

1. To combine all sorts of information together and make incisive decision without too much human judgement.
2. What if there is inside trading or financial crime involved which isn’t publicly available.
3. Textual data isn’t a good indicator all the time, which might add noise to the decision-making process.
4. For a streaming platform, if I only have the web traffic data, I would look at the following features:
   1. The geographic location of the traffic
   2. The demographics of the traffic
   3. Traffic on different content
   4. Traffic on different devices
   5. Subscriber vs non-subscriber
   6. Traffic on ads

Firstly, to see if the relationship between the number of user base with the traffic from different countries as well as the population data, so that the potential user growth can be determine and compared. It would also be interesting to see how traffic from different devices are performing in different countries, as audiences might have different viewing preferences in different places. Then look at the demographics of the traffics, as younger audiences are more likely to use stream services. Finally mix and match the listed factors to see if you can find trends to indicate the investment potential of the streaming services.

**Challenges**

1. It’s hard to identify great content, high budget, famous actors don’t guarantee higher streaming traffic.
2. Streaming sector has been quite competitive recently, and a lot of streaming companies are willing to subsidise some of the cost to attract user growth, which means the true profitability can be a bit murky.
3. The impact of allowing ads on the streaming platform can be unclear, it can add another source of the revenue, but it might reduce number of subscribers.
4. Political challenge can be unpredictable. Things like false information can always impact media companies.
5. For the analysis in e-receipt data for food delivery/grocery delivery company, I would look for the following:
   1. The type of food purchased
   2. The demographics
   3. The geographic location
   4. The distance of the restaurant and home
   5. Deliver duration and time
   6. Subscriber vs non-subscriber
   7. Promotion info

The first step is to see if there is any trend among the demographics and geographic location among different time. To see how many users are still using the service after the promotion period is gone. Then maybe look at the order time and deliver time and factoring the distance between deliver location and restaurant location and possible the weather information. Also, to see if there has been growth in subscriber, as it’s another revenue source and this indicates more long-term customers.

**Challenges**

1. GDPR
2. Different format of email receipt.
3. Driver information and review might not be as easy to obtain and some of these delivery company hire their own riders.