The employment trend in Technology sector from 2012 to 2021 is shown in Figure 1.
In the last decades, the total number of employment was fluctuated around 700,000 to 900,000, and went to a peak at around 903,530 in2012. However, there is a significant drop since 2019, where the number has declined from 890,609 to 776,821, hitting the lowest level in the past ten years.
Obviously Economics and social disruptions caused by the COVID-19 pandemic has lasting effects on employment in Technology sector.

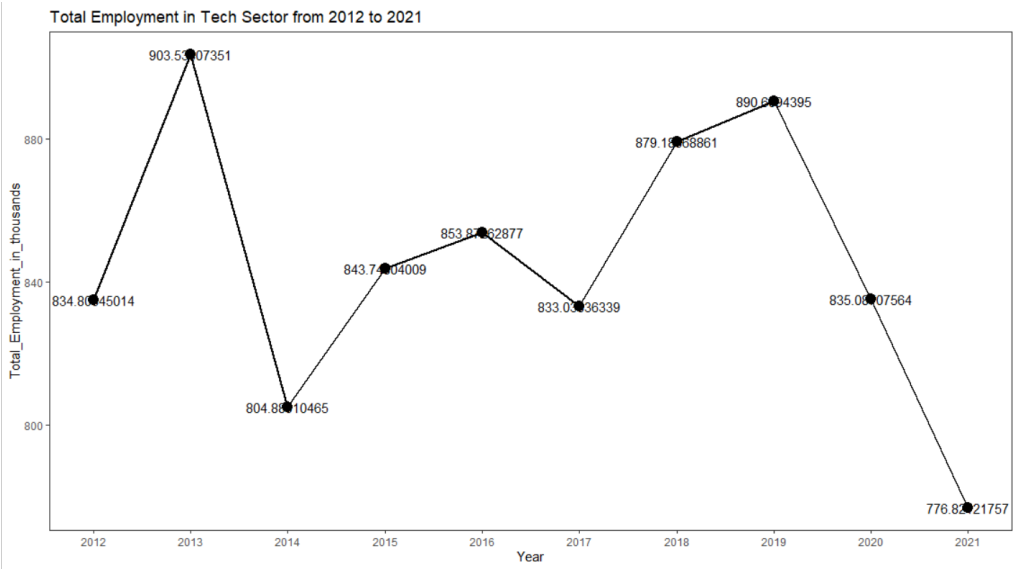

Figure 1

By looking at different sub-industry in the Technology sector, the Telecommunication industry also has been impacted by the COVID-19 pandemic. As Figure 2 has shown, there is a sharp decrease in number of employment after 2018 right after it hits the highest point.

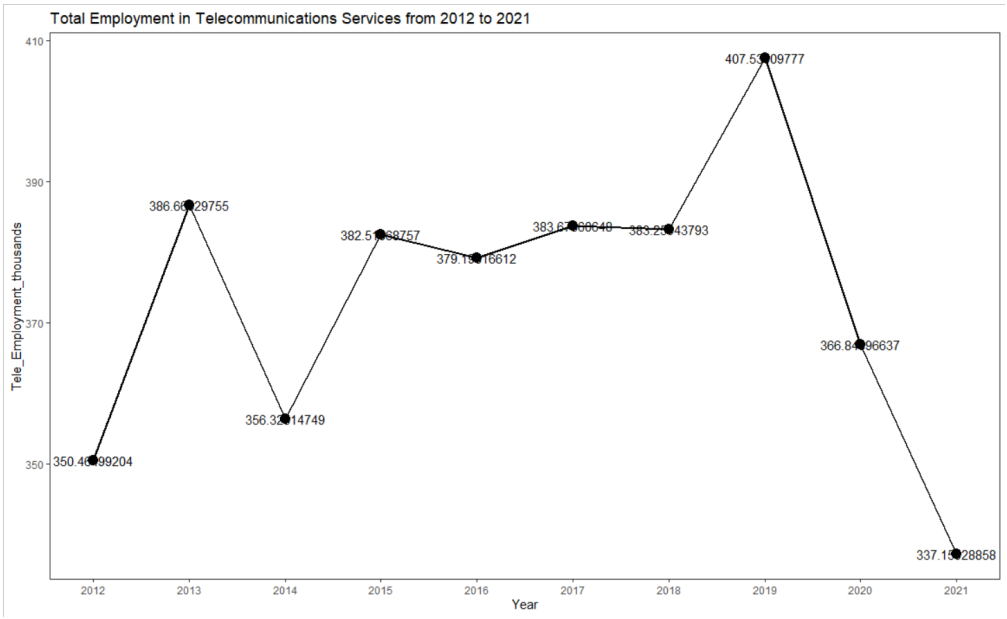

Figure 2

On the other hand, the Data Processing, Web Hosting and Electronic Information Storage Services industry has not been affected as much as the Telecommunication or even the whole sector did.
The total number of employment is data processing industry has bounced back from 2020 and stay stable during 2020 and 2021.
This may because there are enormous amount of statistical data that relating to the pandemic such as vaccinated population and COVID-19 new cases updates are needed to be processed, and it will therefore generate new employment opportunity in data processing industry.

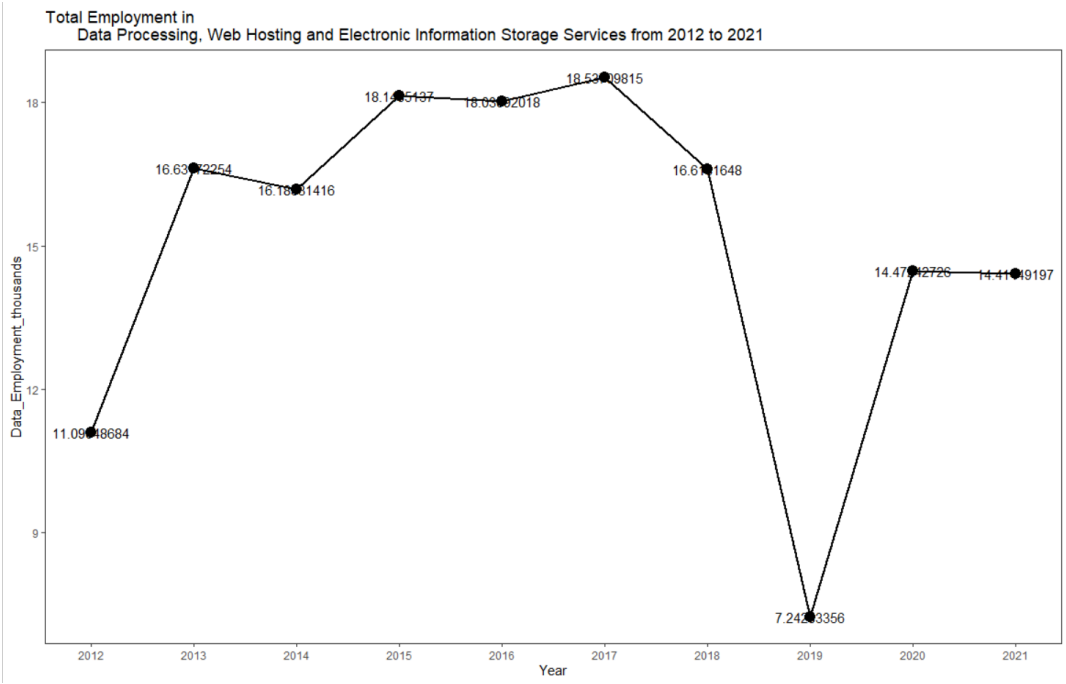

Figure 3

Methodology:

Since the original data from ABS contains lots of information that is redundant to this analysis, I customized them by deleting the past data from 1984 to 2010, and only keep the data in the past decades.
After that, the customized file will be imported into R Studio and used to analyze trends. The first step I did was to define the time interval, because the data is only updated till May 2021. Therefore the annual time interval in this analysis starts at May 2011.
Then in order to analysis each individual sub-industry, I applied constrains in R-Studio. After the sub-industries are sorted, I added the number of full-time employment and part-time employment together. As a result, I can get the total number of employment in a specific sub-industry in each annual time frame.