**Claim - “The financial markets do not punish security breaches.”**

**My observation – The claim holds true.**

**The organizations Anthem and Vodafone had incidents of data breaches that did not impact their stock prices – indicating that the financial market did not punish them.**

1. **Intermediate Data –**

This is a visualization of multiple organizations to help select organizations to support the claim that financial markets do not punish security breaches.

This displays a trend maximum closing prices by each organization.

1. **Final Visualizations** –

These visualizations show a straight growth trend of two organizations – Anthem and Vodafone.

1. Anthem Stock Price Trend
2. Anthem Data Breach -Timeline
3. Vodafone Stock Price Trend
4. Vodafone Data Breach -Timeline

Advantages –

* The Stock Price Trends help the user to have an overview of the performance of the organizations over time.
* The Data Breach Timeline visualizations clearly show rise in the closing prices of the stocks even after the data breach incident.
* The time of data breach is highlighted in Red to attract user’s attention for the point of reference in the Data Breach Timeline.

Disadvantages –

* The Stock Price Trend visualization takes all the events like Mergers over time into consideration.
* The overall impact of the data breach cannot be understood if the data sensitivity is not taken into consideration.

Future work –

* I would like to integrate the following in the visualizations –
  + Data sensitivity
  + Location of the company
  + Cause of breach
* I would also explore a larger set of data and work more on data wrangling.
* In the event that such breaches occur, there are changes in management of the company and the security protocols and policies are improved.