***Big Data and Cloud Computing (Assignment 3)***

***Exploratory Visualization***The process of analysis that we followed was to first generate exploratory plots on how different were companies in terms of distribution of assets and liabilities which yielded surprisingly good results. One being Facebook had most of its assets in form of Liquid Cash whereas a similar stature company of Apple had assets as Accounts Receivable. This interestingly showed the ways that these companies work i.e., Apple being a credit based company which means it gives its products to the sellers as credit and later receives money whereas Facebook shows ads in exchange for immediate cash.   
  
***Analysis***  
Moving forward with the Financial Ratios we found the *Current Ratio*, *Debt-to-Equity Ratio* and *Gross Profit Margin* Ratio. Facebook ranked the highest in liquidity ratio with a considerable amount of value at hand due to the company’s internal working. Posting ads on Facebook requires you to pay by a credit card which instantly contributes to Facebook’s cash equivalent asset. Also, other companies are capital intensive unlike Facebook which would have made a difference.   
  
Debt-to-Equity Ratio found Apple as the highest which meant it operated on more on the debts it took. Facebook again ranks the least here as it already has the cash in hand to cope up in the market hence lower are its debts in the market. Again, goods manufacturing companies have higher leverage ratios compared to Facebook and Cognizant which are non-goods producing.   
  
Lastly came the Profitability Ratio of Gross Profit Margin where Intel beats all displaying the very fact that it is the leader in microchips in the current market apparently without any serious competitions which is exactly what the graph shows us. Apple and Facebook despite of ranking all highs and lows are equally profitable.   
  
***Interestingness of Results***  
Going through the visualizations provided, even non-financial background people can understand a little about what might be going on. Also, results actually are surprisingly interesting because of some reasons we looked at before on how companies having highest and lowest debts rank same on profitability. The behaviour of the market in total makes these findings interesting.

***Value and Actionable Insights***As every company studied belonged to a different sector, its actually quite hard to generalize one simple statement of value that when implied on any industry would yield good results. However, one way can be to play around the debt and equity as both have their own pros and cons and companies can weigh out having good percentage of what gives them higher profits.

***References***

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