**ITCS/DSBA – 6100 Big Data Analytics for Competitive Advantage**

**Project Phase III - Executive Summary Report**

The Big 3 patent office’s i.e. US, Europe and Japan, grants and publishes patent filed by a lot of organizations, out of which the patents published by the fortune 500 companies are out main consideration in this project. The candidates of the US Presidential Elections are funded by various companies all around the United States. We have depicted the benefits enjoyed by the type of organizations, that are benefitted when certain party is in power.

**Data Relations**

We collected US and European patent grants of fortune 500 companies published from 2005 to 2015 downloaded from different sources and archives. The annual sales i.e. revenue of fortune 500 companies is extracted for the same 10-year window and the US Presidential Election outcomes from 1952 to 2012.

As the revenue is highly related to the employee’s benefits, it is essential for the company to take care of the employees. However, the revenue and social scores are less related to each other as a result of which it is likely that the companies ignore their social responsibilities. But this might bring down the ethical responsibilities of those companies, who lack social responsibilities. Looking into the Corporate and Social Responsibility(CSR) scores, the financial sectors are highly responsible towards the society and therefore they yield a good revenue. On the other hand, Home Equipment and Furniture sectors are badly affected in revenue as they are irresponsible towards corporate and social deeds.

We analyzed that International Business Machines Corporation has published highest number of patents and Walmart has earned the largest revenue among these fortune 500 companies. This inspired us to find the business strategies of these companies and how extensively they are using data science and analytics. As they use data science and business analytics strategies in their organization, they remain the leaders among their competitors.

**Election and Organization**

When looking at the US Presidential election result for the last past 6 decades, Democratic party has won 8 terms and Republicans have won 8 terms. Considering the contributors for these elections, *Las Vegas Sands* has significantly contributed in both mid-elections and presidential election to Republicans party only.

When trying to find the benefits of the organizations after elections***,* Financial and Commercial Banking** sectors enjoy an increase in revenue after the victory of Republicans. When considering the Democratic period both Financial Sector and **Engineering industries** are having good increase in the revenue. *Bank of America* was recognized with proliferation in revenue post-election. Though there are few sectors that has an increase in revenue after some elections, there were not experiencing benefits after every victory. However, over the years during the Democrat period, the other sectors have also had a considerable increase in the revenue. We could also see a significant fall in revenue after 2008 even after successful contribution to the winning party, but this should be because of the Great Recession from 2007 to 2009.

**Conclusion**

After 2016 election whoever is elected as the President, Finance Sector will have an increase in revenue. However, Engineering sector can do better if Democrats come into power.