**CA\_04 – 10353271 – Olivia Smith**

**Commits Data Visualisation in Tableau**

I chose to visualise the output data in Tableau focusing on three themes per the below. Bearing in mind this dataset represents a small number of observations, evidently we cannot use the information to make inferences about a larger group of IT professionals. The data does however offer some noteworthy points on performance, productivity and consistency for the sample group.

**Daily Productivity Plot**

Plotting the timestamp extracted from the dataset against the total number of lines updated by author we have an insight into the authors’ daily productivity. Taking into account the disparity between contributions made per author and focusing on those with +20 contributions (i.e. Jimmy, Thomas and Vincent) the trend in productivity is quite clear, we can see the hours of highest productivity tend to be between 11am and 4pm; peaking at 2pm. Although the same trends are indicated in data points for other authors the lack of volume in contributions makes it more difficult to draw concrete conclusions. As an approximation, about 50% of all daily activity involves updates of less than 10 lines.

**Author Performance**

In this Bar Chart comparing total number of Author Updates by Time Stamp we notice a substantial divide in author performance over the five-month period. Thomas made the max number of contributions at 191 edits and Murari Krishnan the least at only 1. Jimmy and Thomas have made +340 contributions between them which exceeds the total number of contributions made by all other team members over the same period (55 in total).

**Lines Edited per Author Year/Month/Day Breakdown**

Using a highlight table to gain more understanding of performance by time unit we note that overall activity decreased from July to September then ramped up again from October to November. September had the least contribution activity with a count of only 44. Thomas performed 21 of these 44 updates. July to October we saw total contributions ranging from 88 to 111 and in November this rose to 184 mainly due to Vincent’s updates which stand at 77 for November. Vincent’s 77 total outperforms both Jimmy and Thomas’s monthly contributions to date.

Drilling into the daily performance, there are a few instances of high activity worth noting which otherwise may have been swallowed in the ‘overview’ data if not represented in this manner. Ajon0002 made 24 edits on November 2nd and Vincent made 28 on November 26th which is interesting to compare against the monthly average for the period (approx. 106 edits per month).

Regarding consistency we can see at a glance that Thomas and Jimmy are always in the darker orange-red categories. Their contributions are at the upper end of the scale month on month and show no significant dips or gaps in performance (except September which was lower for all contributors so reflects the group trend).

To summarise, we can gain valuable business insights through this dataset which could be advantageous for the managers of this team/project in many ways, such as rethinking group task allocation, project management, employee recognition, exploring team motivation/learning opportunities.