Data Use Case

Ian Brandenburg

One of the greatest challenges I face with data is the "so what?" factor of data collection. Throughout my studies, the data collected and analyzed has been to identify a specific problem, but I would like to effectively implement data-driven solutions to broader issues. In the context of a discrimination case being waged against a company, such as in this class, I can see a clear social sustainability use case for data; however, issues such as the gender wage gap will still exist, even after this specific case is resolved. I am interested in how data can be used to influence policies or regulations on companies to attempt to systematically reform corporate structures.

In other courses, I have really enjoyed using a bird observation dataset from Cornell University's e-Bird project, which collects observation counts from bird observers from around the world. This data set is quite interesting, because it allows researchers to see the change in migration patterns alongside the change in temperature while targeting specific regions. This could also be visualized by using time series animated heat maps. One of the greatest constraints I have had with this dataset is that it consumes large amounts of computer storage. The full database takes up 126GB, so filtering it down to specific species was necessary.

I would like to conduct future projects that will collect data on human rights, because this seems like a complicated area to collect data on and find ways to productively use this data. One of the key challenges I see here is the "so what?". After we have identified the social rights issue, we must discover ways to effectively implement solutions. It can also be quite difficult to collect data related to human rights. A lot of these human rights issues have been identified already, so I want to identify ways that the data can be used to combat these issues.

Throughout my time at CEU, I have used the well-known hotel and employment datasets from the Data Analysis courses and have found it straightforward in making business decisions using these datasets. The data set not only reveals gender wage gap trends, but it also allows us to address confounder variables and additional explanatory variables. This practical application of data underscores my belief in its power not only to reveal but to resolve pressing societal challenges.