The University of Manchester

Q-Step

A step-change in quantitative social science skills

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Nest: what drives staff happiness and satisfaction?

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Overview of the Data Fellowship

Over the course of 8 weeks (fully remote; from end of June to August 2021), I took part in one of five NEST internship positions filled all by women, our mission to create dashboards with different purposes to fulfill its users' needs. The impact of COVID resulted in many companies rearranging how their staff work - NEST included. My task over the two months was to create a user-friendly dashboard using Microsoft Power BI based on an investigation of staff happiness and satisfaction, using staff survey data to put together a drivers analysis to interpret what the company is doing well and what needs to be improved. After an interview with the user - who decided she wanted to see gender and ethnicity as the two main factors being highlighted on the final dashboard - these two themes became the center of my investigation upon staff satisfaction. The user hoped I could discover something new through cleaning NEST's staff data and past reports to construct a dashboard of information the company hadn't focused on in the past.

Data Analysis

The process of the analysis mainly revolved around Microsoft Excel and Power BI. After receiving lists of data sources linked to my project, I must first clean the data through Excel and determine what is useful to answering the bigger question - this included looking for data connected to staff engagement, gender and ethnicity (specifically of BAME staff). I was also provided with relatively new data collected during COVID periods. In the heaps of annual and pulse data my task was to find connections between variables that are linked with staff satisfaction, gender and ethnicity. This involved working with features within Power BI and producing interactive graphs that tell a story - beginning with bigger themes and narrowing down to specific drivers that illustrate a timeline of staff responses. In the last week at NEST I presented the completed dashboard and its findings to my user, and afterwards to a group of data analysts.

Findings

By the end of the project a five-page interactive report on Power BI was produced with findings between staff satisfaction and gender, ethnicity. A conclusion of the key influencers was drawn with specific themes such as "Respect" and "Reward" in staff responses analysed, with the relationship between gender (specifically women) and BAME staff in leadership roles being the highlight of the report and how this changed overtime up until COVID.

Key Skills Learnt

Working with senior staff within a company: trying to meet user's requests. Since the first interview each feedback session with the user provided new perspectives and suggestions to improve the existing version of dashboard. Although this was valuable this also put pressure on the demands of more results in a short time, especially since Power BI was a new territory for all interns. Creating the dashboard for a specific audience also means the presented data must satisfies the user's level of data interpretation. It must therefore be in a creative form that can be understood easily by users who demands efficiency and doesn't prefer to see too much detail in a report.

Learning a new skill under time pressure: Power BI is a software none of the interns had come in contact with before. Although the NEST team was very helpful in tutorials and organizing meetings to ensure we are on track, it took some time to navigate and understand its functions completely. With an 8-week deadline on the tail and the entire project based on Power BI, it was essential to learn to operate the software within the fastest time period. With the data handover delayed for a while due to security checks and IT - it reduced the time for us to learn how to use the programme, which was a big challenge during the internship.

Time management and organization: when these factors significantly reduced the time we had to produce the final product, this was when time managing and organization came in place and certain tasks were prioritized over others. Although the user had many requests on what she wanted to see analyzed, she was not a data analyst and it was important for me to recognize that although I'd like to satisfy the user's needs, not everything could be done within the span of time and priorities needed to be made.

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