

Unit 3, Assignment 3

Using IT Tools to Produce Management Information

George Hotten

March 15, 2023

Identifying a Dataset

To obtain an appropriate dataset for the task, I will be using the Office for National Statistics's Nomis website for data on official census and labour market statistics. Using this, I will generate data based on location for young professional workers. I will be using Nomis' WP6110EW dataset, Industry by Age.

In my query, I will be using the following selections:

Geography	region ⓘ 🇬🇧 <input checked="" type="checkbox"/> Tick to select columns <input checked="" type="checkbox"/> East Midlands 🇬🇧 <input checked="" type="checkbox"/> London 🇬🇧 <input checked="" type="checkbox"/> Wales 🇬🇧 <input checked="" type="checkbox"/> West Midlands 🇬🇧
Age	<input checked="" type="checkbox"/> Age 16 to 19 <input checked="" type="checkbox"/> Age 20 to 24 <input checked="" type="checkbox"/> Age 25 to 29
Industry	<input checked="" type="checkbox"/> A, B, D, E Agriculture, energy and water <input checked="" type="checkbox"/> H, J Transport and communication <input checked="" type="checkbox"/> K, L, M, N Financial, Real Estate, Professional and Administrative activities <input checked="" type="checkbox"/> O, P, Q Public administration, education and health

Figure 1: Nomis summary of selections for dataset WP6110EW

In this dataset I have selected young workers, age 16-29 who live in and around the Midlands, London and Wales. These young people work across different professions, such as:

- Agriculture, energy and water
- Transport and communication (including IT)
- Financial, real estate and administration
- Education and health

Using this information I can find which locations have the highest amount of professional workers for the roadshow.

Why the Dataset is Reliable

Nomis, which is operated by the Office for National Statistics, ensures that all its data is fit for purpose by following the European Statistical System and their Code of Practice for Statistics. This ensures the following dimensions of quality:

- **Relevance** - how far the statistics meet the users needed in coverage and content.
- **Accuracy and Reliability** - how close estimated values are to the actual result.
- **Timeliness** - the time between when the data is published and the date when the data was taken.
- **Punctuality** - the time between the planned publication and the actual publication of the data.
- **Accessibility and Clarity** - how easy it is for users to access the data and the quality of the data's illustrations, accompanying advice and metadata.
- **Coherence** - how similar data from different sources and methods are about the same topic.
- **Comparability** - how easily can data be compared over time and domain, such as geographic level.

These dimensions of quality ensure that all data produced by the ONS is accurate, reliable and relevant as their data is regulated by the government's Statistical Authority, and they follow the quality regulations of the European Statistical System. This ensures all the data I have downloaded for this report will be accurate and relevant to the bank's needs.

Visualizing the Data

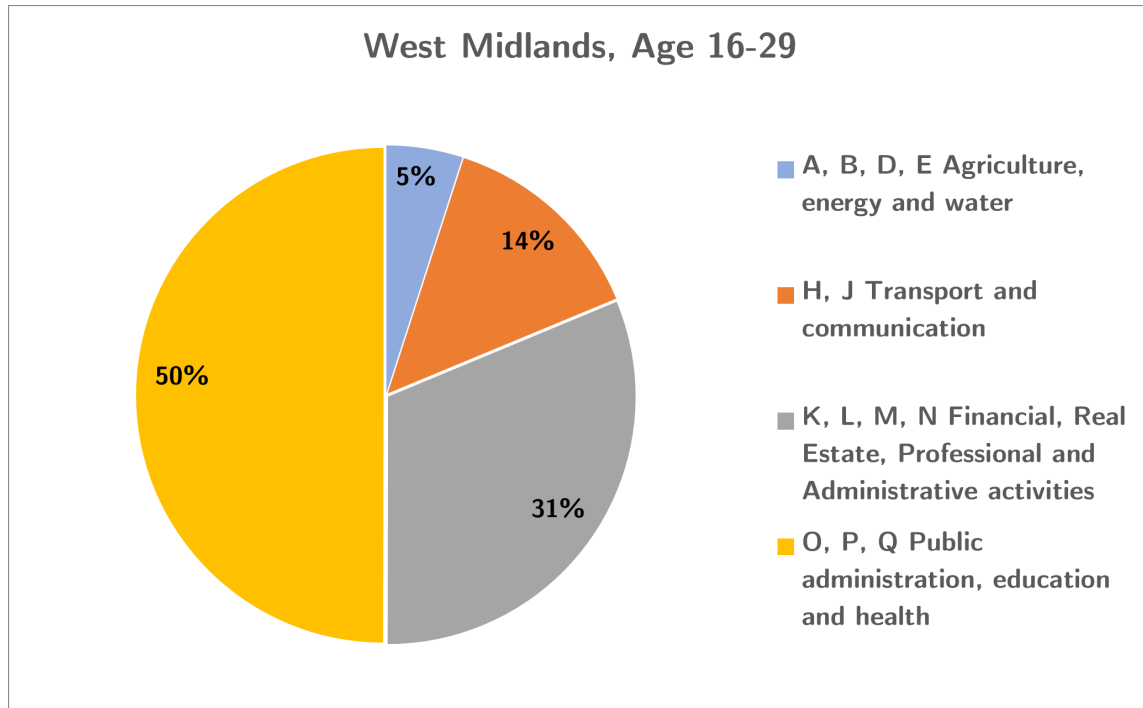


Figure 2: Pie chart of data from the West Midlands

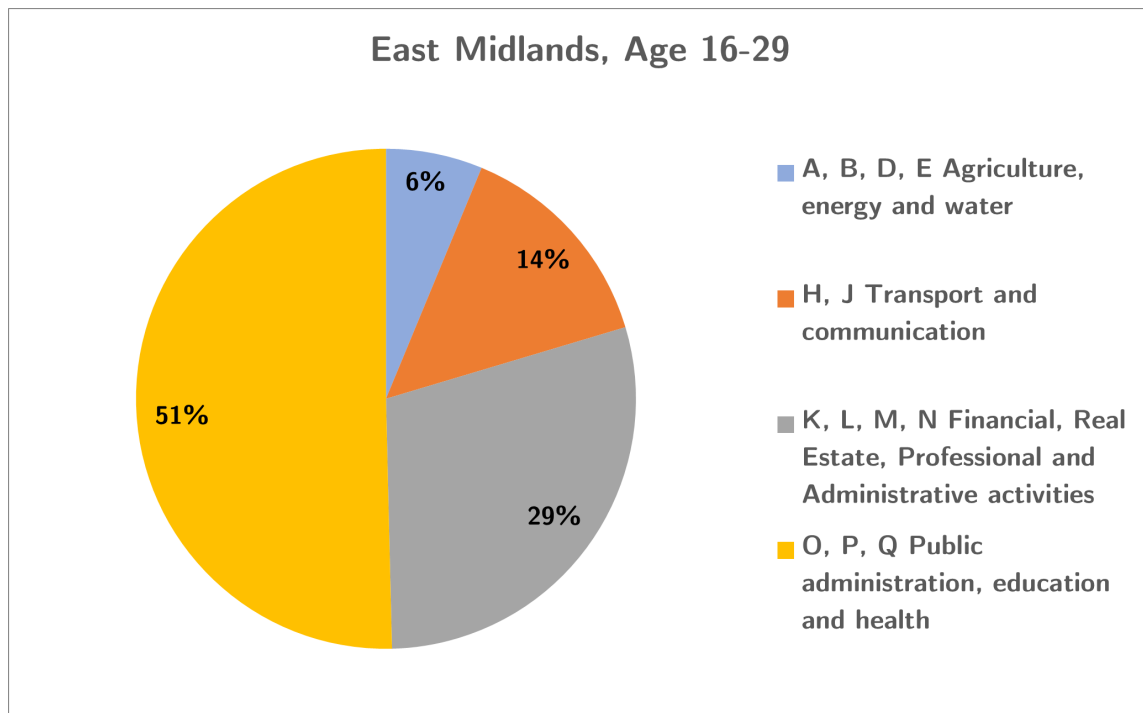


Figure 3: Pie chart of data from the East Midlands

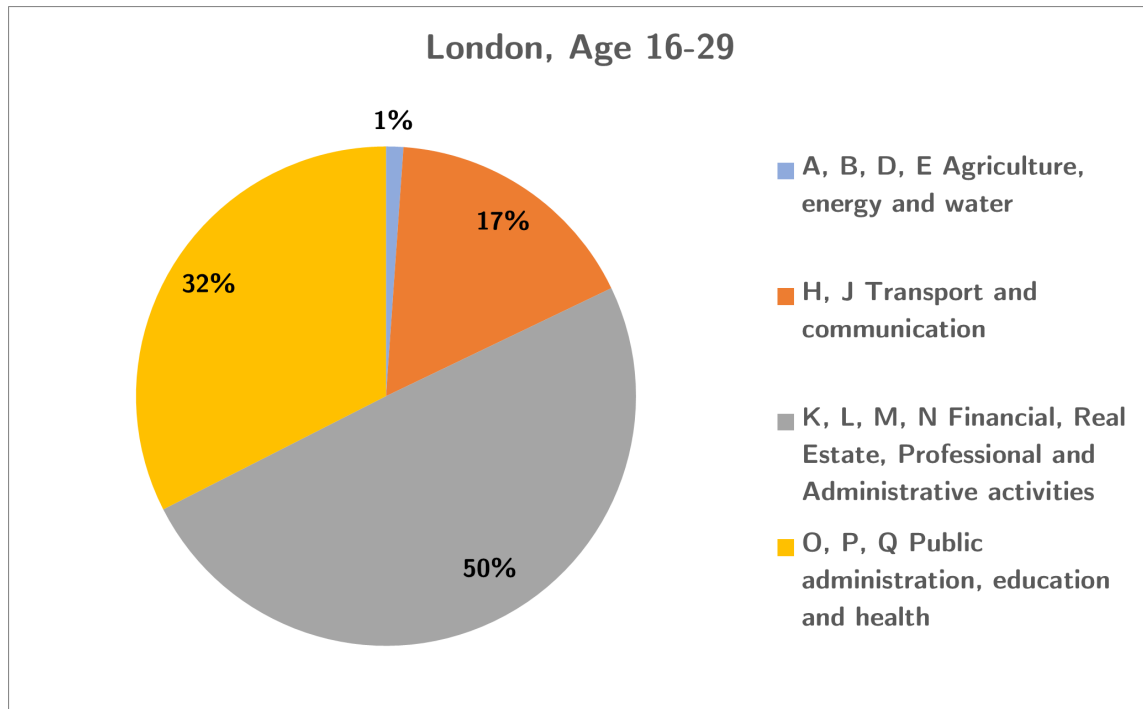


Figure 4: Pie chart of data from London

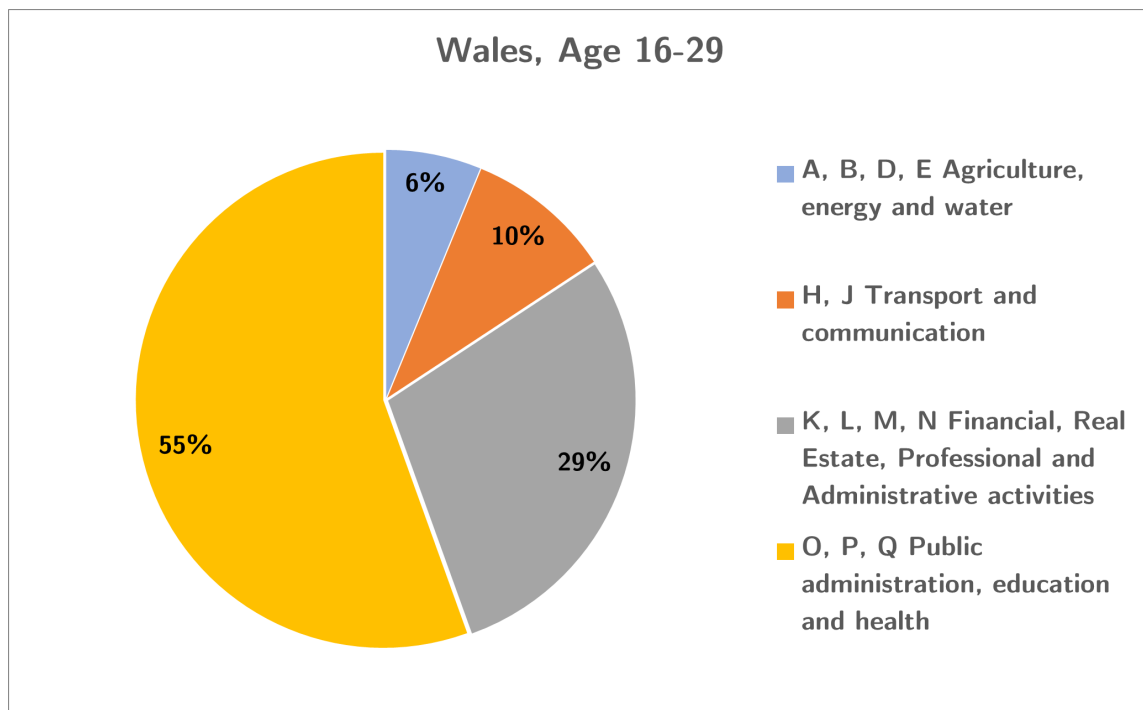


Figure 5: Pie chart of data from Wales

Identifying a Suitable Location

After combining the regional data for groups K, L, M, N, O, P and Q, I created the following bar chart:

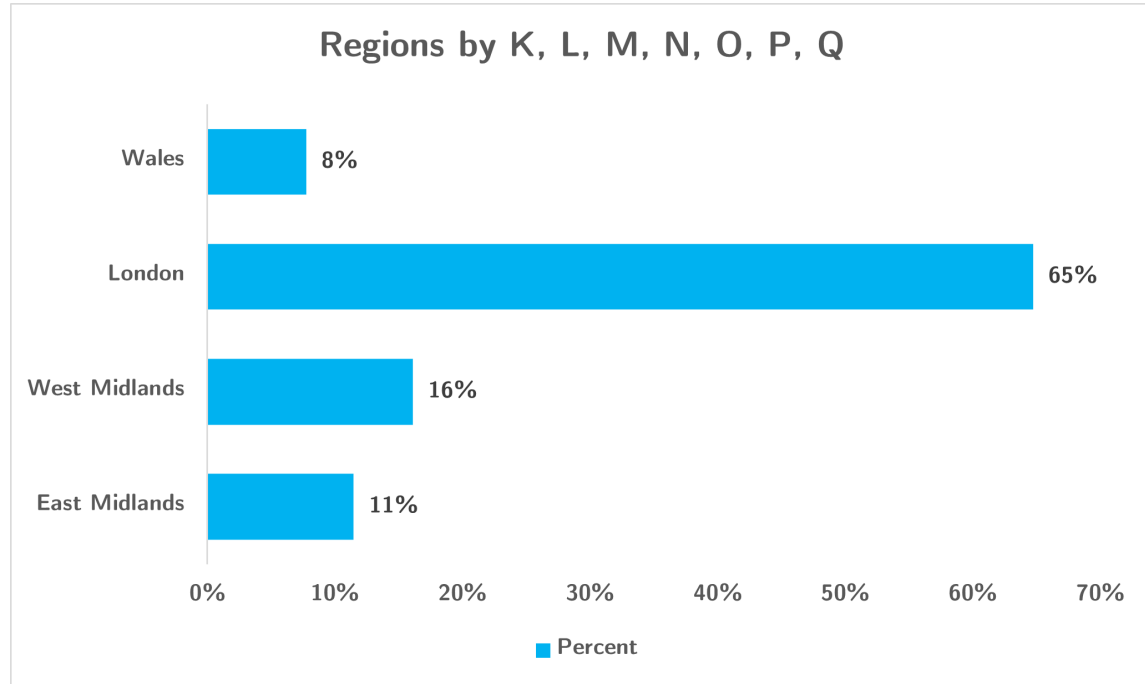


Figure 6: Bar chart for the combined regional data

This shows that London would be the most ideal location to host the road show, as out of all 4 regions it has the most young professional workers. This is followed by the West and East midlands.

The Validity of My Findings

To ensure that my findings were fit-for-purpose, valid and reliable I used a range of different techniques whilst retrieving the required data needed to identify a suitable location for the bank's roadshow.

The information I have presented was sourced from the Office for National Statistics, specifically their most recent dataset on the type of jobs people have. By using this dataset, it insures that my information is fit-for-purpose as it shows what jobs people have within a specific age range. I selected an age range of 16-29, matching the criteria set by the bank looking for young professional workers.

To ensure the information was reliable, I used a dataset from the Office of National Statistics who ensure their data follows the practices of accuracy and reliability from the European Statistical System and the UK government's Code of Practice for Statistics. The ONS are also regulated by the UK government's Statistical Authority who validate the data they publish. This shows the data I have used is reliable as it was taken from a trustworthy and properly regulated source.

To ensure the information was accurate, I used the most recent data set from the ONS on what jobs people have within the different regions of the UK. This allows me to accurately pick a good location for the roadshow to be hosted based on which locations have the highest amount of professional young workers. My data is also accurate as it comes from a reliable source as the ONS is properly standardized and regulated by multiple authorities.

To ensure the information was useful, I pulled data from the closest regions to bank's office and presented them in a wide variety of graphs to help the bank's management understand the data I collected. I took the information I downloaded and converted them into pie charts and a bar graph. This helps show which jobs each region has the most young workers in and helps show which region has the highest amount of professional young workers. This helps make the information useful to the bank as it meets the criteria set out to me to assist in finding a suitable location to host the roadshow, of which I selected London and the West Midlands.

Justifying the Information Selected

After researching and analysing data from the Office for National Statistics on jobs by age and region, I have to come to recommendation that the roadshow should be hosted in London as it has the highest amount of young workers between the ages of 16 and 29.

The information gathered by the ONS shows that London has a significantly higher percentage of young workers compared to the other regions researched: West & East Midlands and Wales. This means that there is a higher chance of attracting a larger young audience for the roadshow compared to the other regions. The data also shows that London has a wide variety of young people in different professional jobs, such as financial, communication, administration, education and health. This means that the roadshow is likely to attract a broad range of professions and interests.

As the data shows there is a large amount of young workers in professional jobs, it could show that London had a large thriving economy and a high number of educational institutes. This can indicate that London's young professional workforce are dynamic and could be open to new ideas and opportunities.

The information collected will also be useful for marketing towards our target audience. By looking at the region, a campaign can be created that can attract young workers by their interest and aspirations. The message of savings and investments the bank wants to portray can be tailored to the workers of London, highlighting the benefits of attending the roadshow and putting their savings and investments with the bank. This can portray the benefits such as keeping money aside for your future home or investing in a new and upcoming startup, and other benefits that are likely to appeal to the young workers.

To support the making of this decision, I converted the data gathered by the ONS into appropriate graphs to help portray which region would be the most appropriate to host the roadshow in. Using the bar graph from figure 6, I was able to show that London has the highest percentage of young workers compared to other regions. This allowed me to make the informed decision to choose to recommend London as the region to host the roadshow.

To conclude, based on the data from the Office for National Statistics, I would suggest the roadshow is hosted in London. London has the largest number of young workers with a mix of different professional jobs allowing the bank to reach the largest possible audience during their roadshow. Using an appropriate campaign promoting the benefits of saving and investing to the young workers based on their interests and aspirations, the bank will be able to reach and inspire a broad range of attendees and young workers looking to break through in their industry.