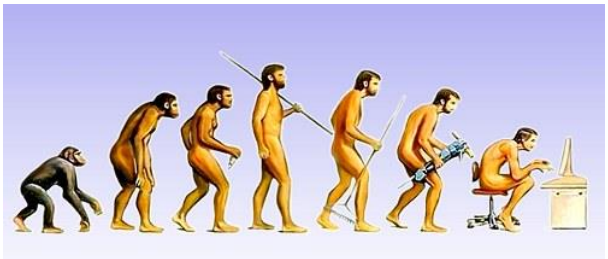
Women in Data and Digital Innovation DC

Historic Visualisations



- John Snow used a map to show the relationship between the pumps and the spread of cholera in London. The representation used spatial analysis to enable the authorities to contain and control the spread of the disease and help to determine the root cause. Data analysis of the population was also

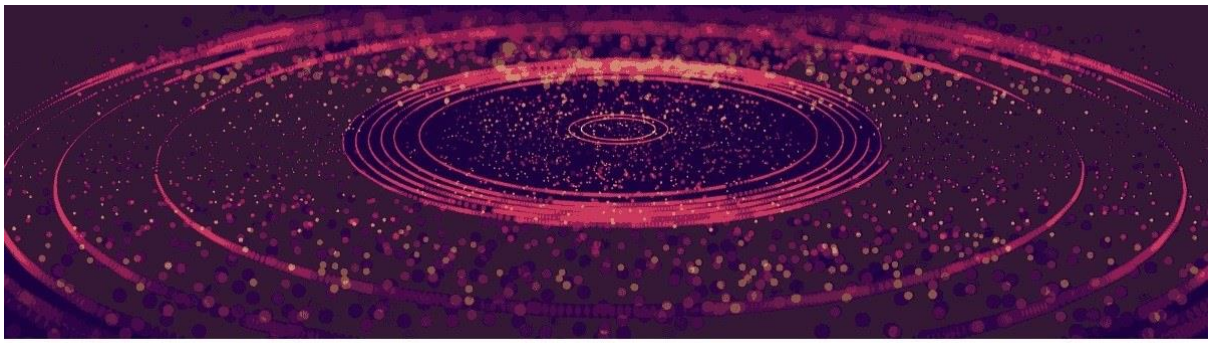
used to map the spread through population by household members. Although this was effective it doesn't account for the likes of travelling salesmen, transients and other anomalies which may lead to the spread of the disease further afield.

- John Snow's methods are still used to this day to understand the spread of disease by using data and visualisation techniques to send help needed to the relevant hot spots to contain it and bring it under control.

- William Playfair was the inventor of the bar chart, line chart and pie chart. Data was used in order for him to collate the necessary information and present it in a visual fashion making it easier for people to understand. His data visualisation's showed the correlation between two forms of data plotted against each other and represented in a much easier format for the intended audience to understand.

- William Playfairs methods are still used today in all areas of life from education to data science and further. It can show exponentially large data analysis files in its simplest form. It can also highlight points of interest to increase or decrease factors affecting the information such as productivity, spending, failures etc.

7 V's of big data



1. Volume:- The amount of data generated over a vast majority of devices and connections by both organisations and individuals alike.
2. Velocity:- The speed of processing, analysing and outputting of data collected to enable consistent information, communication and dissection for an outcome.

3. Variety:- Data can be everything from the mundane messages and videos to databases in the form of structured and unstructured information.
4. Veracity:- The data needs to be trusted to enable it to be used properly especially in the form of ML without causing consequence with decisions based on false information.
5. Value:- The data that is used has to enable the user to effectively apply it to give insight for a productive, valuable and insightful outcome to further e.g productivity, efficient marketing, sales etc
6. Variability:- Data can be difficult to process and analyse with language interpretation and the flow of data constantly changing,
7. Visualisation:- Data is easier to represent in the form of charts and graphs to enable it to be understood.