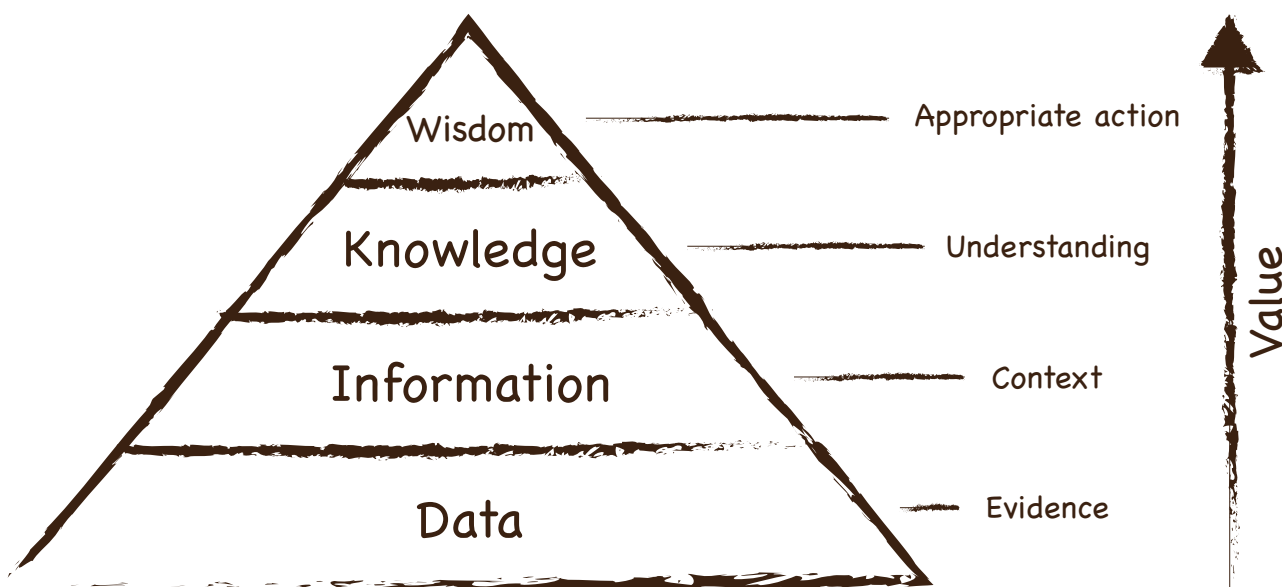# Data Expedition
What is data and how useful is it?

There are a few definitions of data, but for our purposes we like to think it a series of observations, measurements or facts. On their own these can seem abstract, random or even arbitrary. It is only when we add context does data starts to become useful. The more domain knowledge and experience we add, the more value we create from our data.

It is sometimes useful to think of how we use data as a pyramid split into four layers. The bottom layer is the data that we collect or are able to access from other sources. On its own it is pretty useless. As we add context to the data - this could be information about how the data was created, the format it is in and how it can be used (metadata), or context we can add from prior experience of domain knowledge - the more valuable it becomes. This layering allows dumb data to be turned into information and we want that information to be actionable.

With this information we can create new knowledge or augment things that we already know. This leads to greater understanding of the world around us. How we are able to interpret the information and create an environment of understanding is essential to enabling the top layer - using that information to make decisions and act wisely.

The DIKW pyramid