## 1.1 Why do we do data models?

One of the things that can go wrong with data modeling is forgetting why we are doing it, or not knowing why in the first place. The results are damaging: resources are wasted, and the reputation of data models and those that create them is diminished.

So, what are data models about? In almost any enterprise, the answer is that data models are about improving the quality of information used in taking decisions. The key thing here is to understand that quality does not mean ever more accurate. Quality means fit for purpose. So once it is accurate enough, or timely enough, then making it more accurate or available sooner, is unnecessary, will probably increase costs without increasing benefits – and the net value of information is another property that is critical to its quality.

The good news here is that this message resonates well with management. They understand that getting decisions right is important, and that good quality information is a vital input to decision taking, even if they have little awareness of data models themselves. So as long as we can identify how what we are doing contributes to information quality, then we can justify what is being done. The corollary is of course that if we cannot show how what we are doing contributes to information quality, then we should not be doing it – and that is useful to know too.

Figure **Error! No text of specified style in document.**-1 shows the critical properties of information, and identifies those that data models support. You will see that clarity – the meaning of data, and consistency – having the same meaning for different parts of the enterprise, are critical contributions that data models make.

In addition, as we shall see, data models play a key role in the information lifecycle through their role in the design of databases and interfaces, and their subsequent maintenance, so physical data models have a big impact on the accessibility of information.
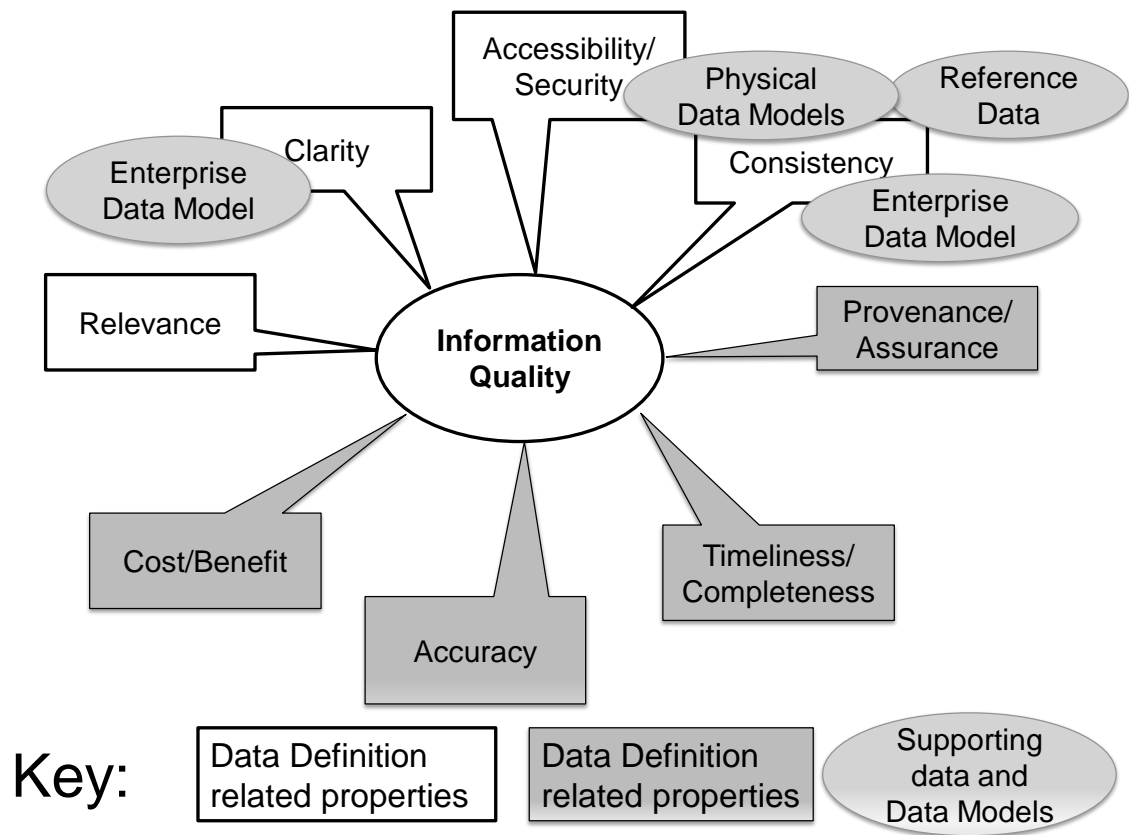
Figure Error! No text of specified style in document.**-1: The properties of information critical to information quality and those that are supported by data models**