

but also ontologies and other content.

8.1.3 Linking Is Vital

The power of the Semantic Web, like the web, is in its links. Links enable knowledge to be distributed across organizations, people, and systems. It enables those who care about knowledge the most to tend to it while still enabling others to access it and find it. Links are lightweight enough to be easily created, while still strong enough to allow for the integration of knowledge. We see this in the Linked Data Cloud where hundreds of specialized datasets can rely on other specialized datasets to provide (in a simple way) more and detailed knowledge about a topic or concept. It seems reasonable to say that in any large information system, the ability to link can predict its success or failure.

8.1.4 A Little Semantics Goes a Long Way

One of the visionaries of the Semantic Web, Jim Hendler, coined the term “A little semantics goes a long way.” This phrase emphasizes the importance of the ability to automatically understand the meaning of terms. Sharing data is not enough – one needs to share meaning. Simply knowing that a bank refers to a chair and not a financial institution goes a tremendous way in enabling sophisticated systems. Throughout this book, we have described techniques for adding semantics to data and making use of that in applications. Whether one adopts these particular technologies in a system is one thing, but a key principle to recognize is that semantics can be a differentiating ingredient.

The principles above have helped make the Semantic Web a success but more importantly they are applicable in the design of any large-scale software system or set of technologies.