

and services and underemphasizing our data. This wrong-headed approach is a big part of why our business units are so perturbed with our IT departments. We forget that companies do not care about software except for the features and functionality it enables. What the business really wants are easier ways to manage the data they have collected, build upon it, and reuse it to support their customers and core functions.

How is it that organizational information management is so radically different from the Web? Unfortunately, the answer has as much to do with corporate politics as it does technology choices. We have legacy systems that complicate modern interaction idioms. We attempt to leverage solutions from vendors whose interests are not always aligned with our own. We want silver bullets that will solve all of our problems (even though Dr. Brooks disabused us of that notion years ago*). Even if you somehow happen to land in an organization with a perfectly matched technology infrastructure, data stewards and data consumers are often in territorial land grab battles that discourage information sharing. This is one of the reasons companies do not function as cleanly as the Web: there does not seem to be suitable incentive to share, even though there is clearly a need to do so. The take-home message is that not all problems are technical. To some extent, Web techniques will help us route around political problems, too, because you do not always need special permission to expose links to information that is available to you in other forms.

The good news is that we can look to the Web for guidance on what makes it such a splendid environment for finding information. Applying these concepts within an organization can help solve this problem and allow similar benefits, such as low-cost data management, strategies for architectural migration, information-driven access control, and support for regulatory compliance. The Web's success is largely due to the fact that it has raised the possibilities for information sharing while also lowering the bar. We have created tools and protocols that simultaneously support knowledge transfer between the leading scientific minds of the world as well as allowing our grandmothers to connect to their families and find content and communities that interest them. This is no small feat, and we would do well to consider the confluence of ideas that led to these realities. We have to live within the architectures we build, so we should build architectures that simultaneously satisfy and inspire us.

Conventional Web Services

Before we begin looking at a new architecture for our information-driven environments, we should take a brief look at how we have been building similar systems recently and see what might be done better. We have been pitched a dominant vision for Enterprise Architecture for the last (nearly) 10 years that is built around the notion of reusable business services. We need to remind ourselves that Web Services were intended to be a business strategy, a way to enable functionality to be defined in a handful of places, accessed anywhere, from any language,

* http://en.wikipedia.org/wiki/No_Silver_Bullet