

## **IT is changing and this time it's a really big deal!**

**Jim Metzler**

I had a conversation with a friend of mine the other day about how the overall IT environment is changing. He looked at me, shrugged and said "IT always changes. What's the big deal?" While I certainly have to agree with his statement that IT is always changing, I want to use this blog to explain why this time it's very different. Why this time it truly is a big deal.

As I said, we are used to the IT environment changing. Not that long ago the industry spent several years adopting VoIP and for the last twenty years we have been on a march to implement continually higher speed Ethernet connections. Those changes, however, were very narrow in scope and didn't have much impact outside of a subset of the IT organization. As discussed below, today things are different in because we are experiencing fundamental change on 4 key dimensions

### The pressure being felt by CIOs

While there have always been instances in which a company's business and functional managers took steps to bypass the IT organization, until recently nobody seriously challenged the CIO's role in delivering IT services. However, driven by the requirement to align IT services with business needs, the role of the CIO is under attack from other C-level executives who feel that they are better positioned to leverage technology for business value. Gartner has chronicled the ongoing battles between the CIO and the CMO and has stated that by 2017 the CMO will spend more on IT than the CIO. More recently, we have seen the emergence of the Chief Digital Officer (CDO). The CDO is typically responsible for the development and management of the company's digital business models as well as the management and delivery of functionality such as web, mobile, social media, and e-commerce. Today there are 1,300 executives who hold the title of CDO and many more with titles such as "Head of Digital Strategy" or "VP Digital".

### The expectations of the users

If you looked inside virtually any company a decade ago the IT organization was regarded as being the technology gurus. At that time, the vast majority of a company's employees didn't regard themselves as being tech savvy and they didn't have unreasonably high expectations of the IT organization. Today the environment is dramatically different. Today a company's employees have ubiquitous high-speed Internet access both from home and from a variety of mobile devices and there are literally hundreds of thousands of applications that they can quickly download either for free or for very little cost. As a result, employees are now questioning why their company's IT organization can't provide the same level of IT services and access to applications that they have in their personal lives.

### The growing presence of alternatives to the internal IT organization

As was previously alluded to, there were occasions in the past when a business unit manager couldn't get what they wanted from the company's IT organization and these business unit managers worked around the IT organization. They typically did this by building their own

shadow IT organization that was comprised of people on their staff whose role was to provide the needed IT services. Driven in large part by the growing need to align IT services with business requirements and the growing expectation of users, in the current environment public cloud providers play the role of a shadow IT organization.

### The fundamental shift from being hardware centric to software centric

Until relatively recently, all of the key components of the infrastructure were hardware-centric. Using networking as an example, network components such as switches and routers have traditionally been based on dedicated appliances. Around five years ago IT organizations began to adopt server virtualization – which is the first step on the path to a software-centric IT function. Today most IT organizations today have implemented additional forms of virtualization including the virtualization of appliances such as WAN Optimization Controllers. However, until recently, the network has resisted virtualization. That situation is beginning to undergo fundamental change with the emerging adoption of Software Defined Networking (SDN).

So is my friend right that IT is always changing? Yes, of course he is. But changes such as adopting VoIP or higher speed Ethernet connections don't threaten the role of the IT organization nor do they make fundamental changes in the jobs of network engineers. That's what is different in the current environment. The breadth and extent of the changes currently underway do threaten the role of the IT organization and as will be detailed in a future white paper, they also fundamentally change the role of network engineers.