

What Impact Will SDN have on Business Processes?

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Two years ago most articles, webinars and seminars on SDN seemed to focus largely on some of the technical details such as the role of OpenFlow. In the last six months the conversation has changed to where it now often focuses on linking business policy and SDN. It is difficult to be against the idea of linking business policy and SDN, but that idea raises a number of questions. One such question is will SDN enable companies to transform how they do business?

To put this discussion in context, I should point out that for roughly twelve years I was involved running networking organizations at two Fortune 500 companies. During that time frame I was involved with several waves of networking innovation. In the LAN that includes migrating from a number of shared technologies, such as Ethernet, Token Ring and FDDI, to switched Ethernet. In the WAN that includes migrating from time division multiplexing (TDM) networks to Frame Relay, ATM and MPLS. In most cases, the migration was driven by cost savings. In some instances, we were able to add additional value by improving the availability of the network and by implementing some quality of service capabilities. However, not once in those twelve years did I, or anybody else that I know of in the network organization, have a discussion with a business manager about how any of those technologies would enable them to fundamentally improve their business processes.

All of the discussion over the last decade about aligning IT with business had caused me to feel professionally guilty about the narrow focus of the network migrations that I had been involved with. However, a somewhat recent MIT study¹ assuaged my guilt. That study pointed out that implementing new technology can have three effects. One effect is that the new technology is used merely as a substitute for existing technologies. That is the effect that I most often experienced. A second effect is that the technology enables the company to extend their brand or their product line by techniques such as leveraging the Web or by implementing mobile technologies. The third effect, which the study refers to as the transformative effect, enables the company to transform its business processes. It shouldn't come as a surprise to anybody that the study pointed out that in the vast majority of instances, senior IT executives believe that they are experiencing effects one and two, and that they rarely experience effect three.

So is this a call to action? Should network organizations have a strong focus on how SDN can enable fundamental business change? No, I don't think so. If I were still running networking organizations I would focus on things that are potentially doable in a relatively short timeframe to try to get some early wins. Implementing virtual networks using SDN and using SDN for network monitoring come right to mind.

I would take that approach because network organizations unto themselves cannot cause fundamental business change. That has to be lead and coordinated by the company's senior leadership. That doesn't mean that network organizations should sit idly on the sidelines. Networking organizations can and should deploy the technologies that enable fundamental business change and they can and should actively advocate for those changes.

¹ <http://sloanreview.mit.edu/article/how-to-digitally-transform-your-company/>