The changing role of network management

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It's impossible to read the trade press or attend a webinar and not be confronted with the fact that IT organizations are undergoing fundamental change. However, there is far less discussion in our industry about what those changes mean to network management. That's not surprising as network management seldom gets the same level of attention as does the adoption of a new technology or a new architecture. The lack of discussion is troubling because the implementation and management of all things new relies on a solid network infrastructure and a team with the appropriate skills and tools to support it. No company will successfully implement any new technology if they can't effectively manage it.

One of the factors driving IT organizational change is the increasing pressure to show business value. As a result of this pressure, we often hear the directive that the IT organization must align with the business. *The 2014 State of the WAN Report*[1] contained the results of a survey in which the survey respondents indicated that when one or more of their business-critical applications don't perform well, the company loses revenues and clients. While it can be difficult to know exactly what an IT organization should do to align with the business, ineffectively addressing issues that cause the company to lose revenues and customers is certainly a way to demonstrate total lack of alignment.

The growing presence of mobile and portable devices, coupled with public cloud computing providers is another factor putting pressure on IT organizations to change. In their personal lives today's users have access to a wide range of IT functionality and it is driving a much higher expectation level of the corporate IT organization than even 5 or 10 years ago. This has created a phenomena referred to as *New IT or No IT* which means that IT organizations either exhibit a level of agility that is somewhat close to what is exhibited by public cloud providers or else companies will make continually less use of the applications and services provided by their IT organization.

The 2015 Guide to SDN and NFV[2] contained the results of a survey that documented how much the adoption of a software-centric approach to IT is putting pressure on IT organizations. The survey results indicated that within two years, the majority of IT organizations will have made a significant deployment of virtualized network functions. In addition, roughly a third of IT organizations believe that over the next two years that the adoption of virtualized network functions will have a significant or very significant impact on the structure of their organization. When asked to indicate the type of impact they expected, a number of survey respondents commented that it would require them to change how they implemented SLAs and how they developed a business case. Other comments from the survey respondents include:

- It will reduce the time it takes us to deploy new services;

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[1] http://www.webtorials.com/main/resource/papers/webtorials/2014-WAN-SotM/WAN-2014-SotM.pdf
[2] http://www.webtorials.com/content/2014/11/the-2015-guide-to-sdn-nfv.html

- We will need to adopt a new approach to service provisioning and management;
- It will change how we do network planning;
- We will need to determine how we are going to orchestrate end-to-end systems.

Whether it's the need for a new approach to management or orchestration, or the need to change how SLAs are implemented, the adoption of new technologies and new architectures will have a dramatic impact on network management. So, is your organization ready for the change? Below are three questions you can ask yourself to identify whether or not you are ready.

The first question to ask: Does your IT organization have a well-understood, integrated plan for the evolution of both its applications and the IT infrastructure? Without such a plan it's not possible for the IT organization to understand what new network management functionality is needed. Assuming the IT organization does have such a plan, the second question is "Have you identified what new functionality is required and created a well-understood plan to provide that new functionality? Neither technology nor network management exist in a vacuum, they both rely on skilled network engineers. With that in mind, the third question is does your organization have a well-understood plan for the evolution of the skills of its network engineers that is based on the anticipated changes in business, technology and network management?

These questions should be at the core of network operational planning for today's complex and hybrid environments. If your organization is not addressing these now, you may face continued cost reductions or face being outsourced as the business focuses on supporting functions that tie directly to revenue and/or customer metrics.