

Where's the Heat?



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Introduction

I hate to admit that we are coming to the end of another year. I guess the fact that the year has gone by so quickly makes sense as I used to be friends with people who would tell me repeatedly that time goes by more quickly as you get older. However, I stopped listening to those people a while ago.

I ended last year with an IT Impact Brief entitled "The 10 Top Issues & Events that Impacted Networking in 2006". I want to use the last brief of 2007 to identify heat and the lack of sleep. In particular, the brief will use a survey that we gave to the NetScout community in November to identify which technologies are hot, and which ones are cold. It will also identify the issues that keep you up at night as well as the ones that cause you to get out of bed.

Processes

I sometimes take a very simplistic view of network management and say that all that you have to do to be successful with network management is three things. You need the ability to gather detailed management data from a wide array of sources and then turn this huge volume of data into insightful, accurate information. You also need effective processes that are information-driven.

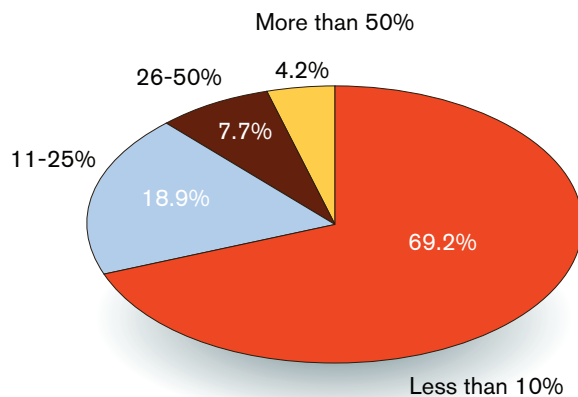
Roughly thirty years ago there was a popular rock band called Meat Loaf. The refrain in one of their songs was "Two out of three ain't bad." While that refrain might ring true for some things, it is clear to me that Meat Loaf didn't understand network management. In particular, without effective processes, IT organizations are just not getting the return on their investment in the capability to gather management data and to turn this data into useful information. Put another way, relative to network management, just doing two out of three is bad.

One of the reasons why I am focusing on processes is because we asked the survey respondents two questions: "Does your company have a formalized process for detecting performance issues? For diagnosing performance issues?" The good news is that over half of the survey respondents answered yes to each question. The bad news is that it was just barely half of the respondents who answered yes. In addition, there is often a big difference between having a formal process and having that process be effective. Based on some other research I did a year or so ago, I feel strongly that if we asked the survey respondents if they had effective processes, the results would have been even less positive.

The CIO as Network Manager

We asked the survey respondents “On average, how much of your CIO’s attention is devoted to network management issues on a weekly basis?” Their responses are depicted in Figure 1.

Figure 1: Percentage of Time CIOs Spend on Network Management



The data in Figure 1 was a little disturbing. In particular I am concerned that roughly 12% of CIOs are spending more than 26% of their time every week on network management issues. I am concerned because in my opinion a good CIO spends the majority of his or her time focused outside of the IT organization, developing relationships with key stakeholders including the company’s senior business managers. The fact that so many CIOs are spending so much time on network management issues could be because the organization is in the midst of making a major change to the network management function. Equally likely, however, is that they are spending so much time because of some systemic issues that have been difficult to resolve.

Consumer Technologies Impacting IT

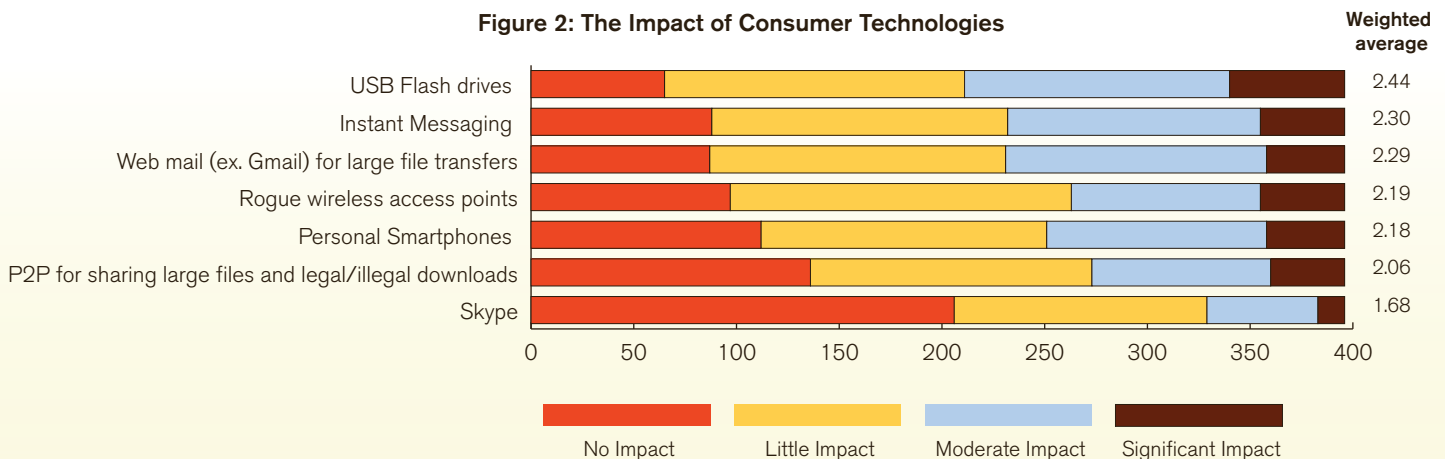
We asked the survey respondents to use a scale of one to four, where one meant no impact and four meant significant impact, and indicate which consumer technologies has had the biggest impact on their IT department. Their answers are shown in Figure 2.

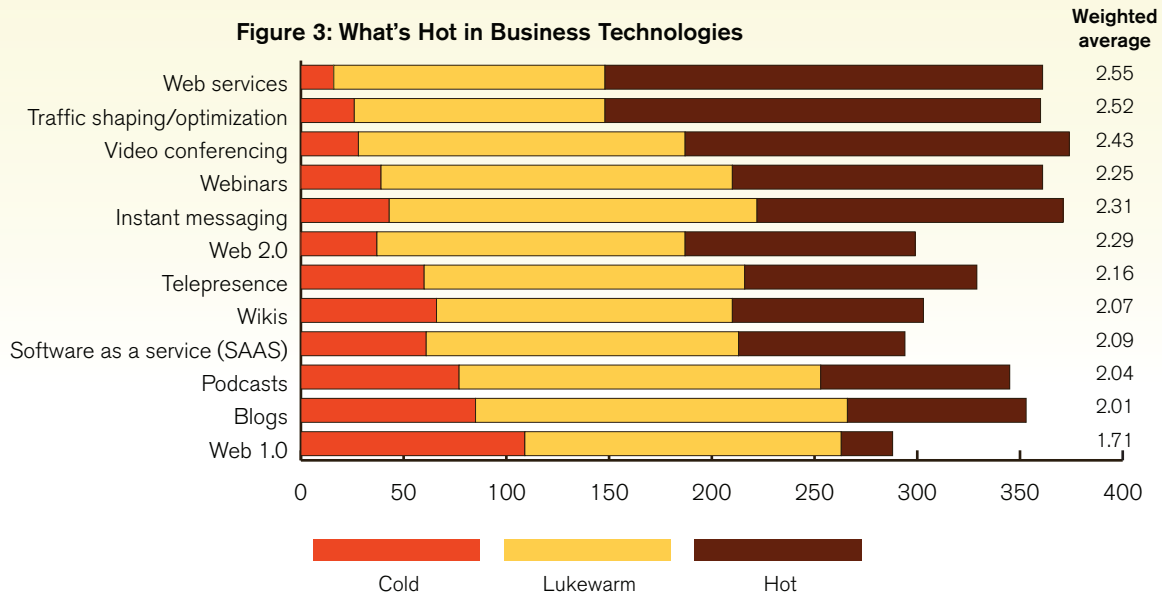
I regard USB flash drives as one of the greatest inventions of the twenty-first century. Because of that, I was surprised at first to see that these drives are such a source of concern to the NetScout community. Upon reflection it makes sense that they cause concern because when a user inserts one of these into a computer at work, there is a chance that malware on the drive will infect the corporate network.

In a previous IT Impact Brief entitled “The Port 80 Black Hole” I discussed some of the issues associated with Instant Messaging (IM), P2P file sharing and Skype. Something that I did not mention in that brief is that most IM systems allow for file attachments. If the IM system is using port 80, it is highly likely that the IT organization is not aware of the fact that potentially infected files are flowing in and out of the company.

I was not surprised that Webmail was of concern to the NetScout community as it represents additional WAN traffic and traffic that will typically be transferred over the port 80 black hole. Specifically, do limits on internal email attachments extend to other Webmail? When they don’t, bandwidth impact may be an even greater concern. I was, however, surprised that rogue access points (APs) are still a major concern as a number of vendors claim to have products that can identify the existence of these APs. As I have finally decided to spend the money to buy a smartphone and the associated communication packages, I was a bit surprised to see that these devices cause so much concern. However, it makes sense when you think about how much sensitive company data is on these devices and how easy it is for them to be lost or stolen.

Figure 2: The Impact of Consumer Technologies





Business Technologies: What's Hot?

We then asked the survey respondents to indicate which business technologies are coming into vogue for 2008 versus going out of style. We asked them to rate each technology on a scale of 1 to 3, with 1 meaning "cold" or out of fashion and 3 meaning "hot" or in fashion. Their answers are contained in Figure 3.

I was not at all surprised that Web services are so hot as previous surveys of the NetScout community had shown a growing interest in Web services. Analogously, the importance of traffic shaping and optimization was not a surprise as a previous survey of the NetScout community showed that ensuring acceptable application performance was one of your most important tasks.

I should point out that I tend to be a little critical when the trade press continues to hype a new technology or trend. Given my critical nature, I was quite surprised to see how hot video conferencing, Webinars and IM is to the NetScout community. Based on your feedback I have to say that in spite of the fact that collaboration appears to be over-hyped in the media, collaboration is an important topic to the NetScout community. To me there is a strong link between collaboration and Web 2.0 that also was rated pretty high up in Figure 3. While there is not a precise definition of Web 2.0 in the industry, when I think of Web 2.0 I think of a collaborative style of application development using techniques such as mashups.

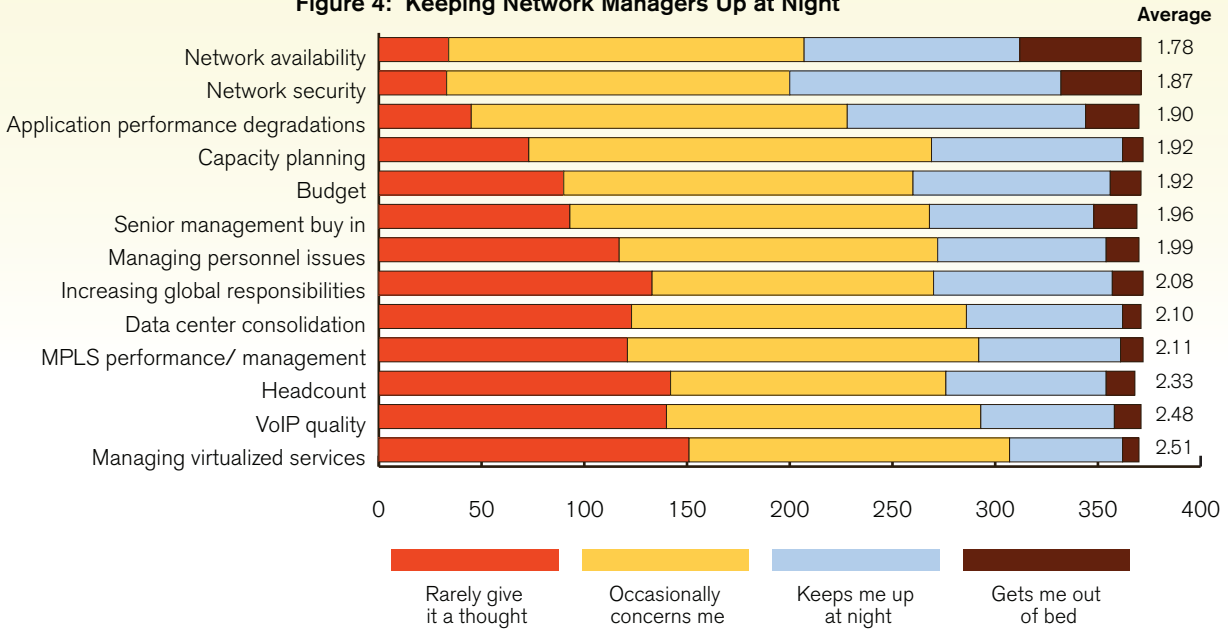
Causing IT Staff to Loose Sleep

We asked the survey respondents to indicate which work issues kept them up at night with worry versus which issues actually get them out of bed in the middle of the night. Their responses are depicted in Figure 4.

The data in Figure 4 is interesting in terms of both what is keeping the NetScout community up at night and what is not. For example, I was a little bit surprised that managing virtualized services is of such low concern. I have to assume that in part this is because these services have not been that widely deployed. My feeling is that over the next couple of years, managing virtualized services will definitely be disturbing your sleep. I was not surprised that VoIP quality was not keeping the NetScout community up at night. That is totally in line with what I am seeing more broadly in the industry. In particular, while industry pundits write article after article about the difficulty of managing VoIP, it does not seem to be that big of a deal to most IT organizations.

It was also not at all surprising that network availability, network security and application performance degradation were the issues most likely to either keep the NetScout community up at night or actually get you out of bed. What did surprise me was that capacity planning was the next most important issue affecting your sleep. We don't tend to talk a lot about capacity planning. Based on Figure 4, perhaps we should.

Figure 4: Keeping Network Managers Up at Night



Summary

While it did go by too quickly, 2007 was a good year. As we enter 2008, we are long removed from the time when every week seemed to bring stories about the hundreds of thousands of unemployed IT workers. What I see these days is that IT is important again and is likely to remain so for the foreseeable future.

I also see that network management is a hot topic. I say that in part because over the last two years I have worked with Network World on their IT Roadmap (ITR) conferences. As a result, I have moderated a conference track on network management in a dozen cities. In addition to a track on network management, these conferences also have tracks on topics that have a lot of sizzle associated with them; i.e., Web 2.0, mobility,

network and application acceleration. The funny thing is that in every city, the track that gets the most attendees is always the network management track.

I attribute the interest in the network management track at the ITR conferences as coming from the fact that your jobs are changing. Whereas network managers used to focus entirely on the availability of networks, the job now involves security and well as the performance of networks and applications. We will spend time next year continuing to figure out what this means for all of us.

I wish you all a great holiday season!



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