

What's Driving IT?



Jim Metzler

Ashton, Metzler & Associates
jim@ashtonmetzler.com

As mentioned in the last IT Impact Brief entitled 'The Lack of Alignment in IT', NetScout and I recently surveyed roughly 150 IT professionals on a variety of topics.

In the last IT Impact Brief those survey results were used to show that IT organizations are making some progress relative to aligning themselves with the company's business and functional managers. However, the survey results also showed that only a tiny minority of companies holistically plans and funds IT, and that only a slightly larger minority of companies troubleshoots IT problems cooperatively across all IT disciplines.

Those survey results will also be the basis of this IT Impact Brief, the focus of which is analyzing the types of projects that are having the most impact on IT. Throughout this brief, the survey results will be supplemented with insight provided by interviews that were conducted with some of the survey respondents.

Survey Analysis

We asked the survey respondents to rate the impact that a wide range of classes of projects will likely have on their IT budgets and infrastructures during the next year. The survey respondents were given four possible answers: not on the radar screen, little impact, some impact, and significant impact

For each of the project classes, we looked at the respondents who indicated that the project class would either have 'some impact' or 'significant impact'. Throughout this brief, the percentage of survey respondents who indicated that a particular project class would have at least some impact on their IT budgets and infrastructure will be referred to as The Percentage. The percentages were listed in descending order. This resulted in a clustering of projects based on the impact that they are likely to have on IT budgets and infrastructure.

Most Significant Impact

Table 1 - Projects with the Most Significant Impact

| Class of Project | Percentage |
|--|------------|
| Adding additional network security protection | 78% |
| Compliance with governmental and other regulations | 76% |

Of the 18 classes of projects covered by the survey, the two listed above clearly stood out as having the most impact on IT organizations. Since the impact of security has been discussed for many years, it was not surprising to see that the survey respondents anticipate that security will have a major impact on their organization over the next year. What is new about security is what people are trying to accomplish. Certainly organizations are still involved in deploying firewalls. However, the survey respondents who were interviewed for this brief pointed out that their organizations were also making a significant deployment of Intrusion Detection Systems (IDSs) and at least a modest deployment of Intrusion Protection Systems (IPSs). These interviewees also noted that their organizations were making more of an effort to deploy security-oriented protocols such as SSL, SSH, and HTTPS.

Unlike security, compliance is a relatively new topic. Hence, at first it was somewhat surprising to see that compliance with governmental and other regulations is expected to have virtually as much impact on IT organization over the next year as security is expected to have. What was particularly interesting was the realization that there was a significant overlap between the anticipated impact of security and the anticipated impact of compliance. In particular, 88 of the 106 survey respondents who indicated that security would have at least some impact on their IT budget and infrastructure also indicated that compliance would also have at least some impact on their IT budget and infrastructure.

That overlap occurs in part because some of the recent regulations are very focused on security. For example, one of the interviewees discussed the Federal Information Security Management Act (FISMA). FISMA requires that each federal agency must develop, document and implement an agency-wide program to provide information security. The interviewee commented that because of FISMA the agency that he works for is looking to upgrade their applications to be more secure.

However, it is worth pointing out that not all of the recently enacted regulations are as focused on security as FISMA is. For example, Sarbanes-Oxley Act (SOX), a U.S. Government regulation, requires management to make a written assertion stating their responsibility for establishing and maintaining an adequate control structure and procedures for financial reporting. One interviewee stated that as a result of SOX “we get a lot of emails from senior managers strongly encouraging us to ensure the validity of the information that we report to them”.

Significant Impact

Table 2 - Projects with Significant Impact

| Class of Project | Percentage |
|--|------------|
| Redesign of some of the company's key business processes | 65% |
| Deployment of Voice over IP (VoIP) | 64% |
| Significant WAN redesign - such as moving from traditional frame relay to MPLS | 64% |

There has not been much written recently in the major networking publications about business process redesign. As a result, it was surprising to see how significant an impact the survey respondents expect that business process redesign will have on their IT initiatives, budgets and infrastructure over the next year. This topic will be explored in detail in a future IT Impact Brief.

The buzz surrounding Voice over IP (VoIP) is just the opposite of the buzz surrounding business process redesign. As an industry, we have been discussing VoIP deployment for years. Given all that discussion, it would be reasonable to believe that the major VoIP deployments have been completed and the ongoing impact of VoIP will be minimal. While that belief might be reasonable, it would be wrong. As seen in Table 2, roughly two thirds of the survey base indicated that VoIP deployment would have at least some impact over the next year. However, from interviews with the survey respondents it appears as if most companies are still not making a wholesale deployment of VoIP, but rather are continuing to deploy VoIP selectively.

As was the case with security and compliance, there is significant overlap in terms of VoIP deployment and WAN redesign. In particular, 63 of the 88 survey respondents who indicated that VoIP deployment would have at least some impact also indicated that their company was undergoing at least some WAN redesign.

That overlap is often the result of IT organizations needing to redesign their WAN in order to support VoIP and other demanding applications. One survey respondent stated that in order to support applications such as VoIP and IP video, his organization was “going through the painstaking activity of migrating to Multi-Protocol Label Switching (MPLS), including the use of Virtual Private LAN Services (VPLS)”.

High Impact

Table 3 - Projects with High Impact

| Class of Project | Percentage |
|--|------------|
| Consolidation of Data Centers | 59% |
| Implementing a policy for delivering applications in a priority manner (e.g., QoS) | 57% |
| Consolidation of servers out of branch offices and into centralized data centers | 55% |
| Deployment of Web interfaces to existing and new applications | 54% |
| Deployment of Web services (i.e., XML, WSDL, SOAP, UDDI) based applications | 52% |
| Deployment of one or more major new applications such as SAP | 52% |
| Providing more functionality to the branch offices | 50% |
| Significant LAN redesign such as moving to 10 Gbps Ethernet | 48% |
| Integrating IT services after a merger or acquisition | 48% |
| Supporting home offices and teleworkers | 47% |
| Improving IT processes using methodologies such as ITIL | 43% |

A number of the project classes that are listed in table 3 will be discussed in future briefs. For example, the next IT Impact Brief will examine the consolidation of data centers as well as consolidation of servers out of branch offices and into centralized data centers.

It was not surprising that both the survey data itself, as well as the interviews with the survey respondents, revealed a significant overlap between implementing a policy for delivering applications in a priority manner and both VoIP deployment and WAN redesign. A more detailed analysis showed that many companies already have deployed QoS to support VoIP, but that some of those companies were now changing their approach to providing QoS. As one interviewee stated “everyone wants to go to MPLS in part to support VoIP”. That interviewee also stated that he doubted that many people “had looked at the problems of MPLS”.

Minimum Impact

Table 4 - Projects with Minimum Impact

| Class of Project | Percentage |
|------------------------------|------------|
| Business Process Outsourcing | 31% |
| Deployment of Grid Computing | 21% |

We discussed Business Process Outsourcing (BPO) in the last IT Impact Brief in which we noted that a significant percentage of companies had already outsourced functions such as help desks, application development as well as components of human resources. We see BPO as a trend that will steadily increase for the foreseeable future. BPO can have a significant impact on the IT organization, particularly if the business processes are outsourced to an offshore provider.

We have been talking about grid computing for a number of years. However, the use of grid computing is still largely restricted to a few industry segments, such as the financial and pharmaceutical industries.

Conclusions

As shown in this brief, IT organizations will be very busy over the next year responding to a wide range of initiatives. Security has been a key driver of IT for years. Bolstered by recently enacted regulations, security will remain a top concern for the foreseeable future. To respond to this requirement, IT organizations are embedding security functionality deeper and deeper into the fabric of both the infrastructure and the applications.

The slow, deliberate movement to VoIP will continue to impact IT organizations. This movement to deploy VoIP is accelerating the acceptance MPLS, even though some IT organizations have serious reservations about the complexity associated with MPLS.

The degree of impact that business process redesign is expected to have on IT organizations was a bit of a surprise. We will explore this in more detail in a future IT Impact Brief in which we also examine the deployment of Web services.

The next IT Impact Brief will look at what is happening inside of the data center. In particular, that brief will look at the consolidation of servers out of branch offices into data centers as well as the consolidation of data centers.



NetScout Systems, through its *nGenius*[®] Performance Management System, offers large organizations cohesive views into application services delivered over today's complex, global networks, helping IT professionals optimize network and application performance and prevent misuse of critical enterprise resources. Based on granular, flow-based performance

information gathered across the enterprise, the *nGenius* System delivers key performance management functions, including application and network monitoring, capacity planning, troubleshooting, and user experience assurance, in a single integrated solution. For more information visit www.netscout.com.