

Business Value of Performance – The NetScout nGenius® Customer Experience

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Many vendors claim to improve the performance of networked applications—but what does that mean for your business? NetForecast’s mission is to quantify the value of better performance.

To justify a technology purchase, you must know that the purchase will deliver maximum business value. Although vendor-provided data is useful, there is no better information source than actual user experience. With this in mind, NetForecast interviewed five NetScout customers to learn firsthand how the NetScout nGenius Performance Management solution delivers business value.

Business Value of Performance

The classic silo approach to IT infrastructure management assumes that if all system elements work well independently, your applications will perform well enough to support your business. For large, complex, and/or far-flung systems the unfortunate truth is that this approach is more likely to impede than support application performance.

Not all business applications are created equal. Some make money or save lives, while others are non-essential or, at worst, waste resources. Without understanding your application flows and the devices those flows traverse, you cannot identify what infrastructure elements affect performance or which applications might be misbehaving. This leads to a fire-drill approach to problem solving in which all hands are called on deck and told to “do something”. Given human nature that “something” is often to report that “everything in my silo is fine, so I’m not the problem.”

What is needed is a business-centric approach to monitoring, managing, and optimizing application performance and IT service availability by gathering and correlating relevant data to flows matched to business functions. Flow-based management tools such as those provided by NetScout enable collaboration across silos to proactively improve application performance and quickly pinpoint and fix application and network performance problems when they do occur. Although this may sound straightforward, it is not because there is a confusing array of approaches, and only a few of them will deliver the best outcome.

Business Value Experienced by NetScout Customers

NetForecast’s research identified the following areas of critical business value customers experienced using the NetScout nGenius Performance Management solution:

- **Faster problem resolution**
70 to 90 percent time savings
- **Improved network staff productivity**
55 to 85 percent network staff productivity gains
- **Better user satisfaction and productivity**
- **Improved cross-group collaboration**

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The NetScout Solution

The NetScout nGenius Performance Management solution provides insight into what is really happening within an enterprise network. This insight is provided through performance visibility, automated early warning, key performance indicators (KPIs), application flow analysis, and packet-level forensics for complex IP networks.

The solution draws information from a range of data sources deployed across the network. It leverages actual packet-flow traffic from the network using its own probes and it also gathers data from other sources. These data sources passively monitor and store data locally for real-time and retrospective analysis. The nGenius Performance Manager provides performance views via a browser or third-party tools and management systems.

For more information about the NetScout nGenius solution visit the NetScout website at <http://www.netscout.com/>.

The NetForecast Methodology

NetForecast performed independent primary research to gather information about the business benefits experienced by enterprises using the NetScout nGenius Performance Management solution. We conducted in-depth telephone interviews with employees responsible for network and application performance in five large enterprises. All of these enterprises use NetScout technology to view, manage, and optimize the performance of applications and IT services over enterprise-wide IP networks.

We asked a series of questions to identify: the business motivation for the enterprises to choose the NetScout technology; the benefits enterprises actually experienced; and how each enterprise translated the improved performance into value for the IT organization and the business as a whole.

The Companies We Interviewed

The companies interviewed use NetScout technology to provide visibility into and to report on network health and capacity, as well as to help identify sources of application performance problems. The customers we spoke to have used NetScout for more than two years to monitor the complete range of applications running over large, complex corporate networks.

The companies we interviewed ranged in size from \$6B to \$38B in annual revenue, and included:

- A European manufacturer with 60,000 employees in more than 200 countries
- A US manufacturer with 50,000 employees in 150 countries
- A national healthcare provider with 180,000 employees
- A regional health insurer with 5,000 employees
- A financial services company with 1,500 employees in offices throughout the US, Europe, and the Pacific Rim

Key Findings

Faster problem resolution, better network staff productivity, improved user satisfaction, and improved cross-group collaboration were the most important benefits the NetScout nGenius customers interviewed experienced. Most of the companies interviewed initially bought nGenius for faster problem resolution, but found it delivered value beyond their initial expectations.

Customers experienced an impressive 70 to 90 percent speedup in problem resolution, and a 55 to 85 percent network staff productivity increase. Faster problem resolution and the resulting improvements in the performance and availability of IT services led directly to more productive and satisfied users among the companies interviewed. In addition, improved cross-group collaboration provided the companies with significant strategic, yet less quantifiable benefits.

For the health insurer we interviewed the combination of nGenius-related business benefits have proved so important that the company's enterprise infrastructure manager told us: "We can't live without it! If we had to cut tools to reduce operating costs, NetScout would be in the top one or two that we couldn't lose."

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Enterprise Infrastructure Manager, Health Insurer

Faster Problem Resolution

Faster problem resolution ranked highest among the business benefits experienced by the NetScout customers interviewed. NetScout technology dramatically shortened problem resolution times for all five companies—frequently from hours or days to minutes compared to previous methods. As Figure 1 shows, nGenius accelerated problem resolution times from 70 to 90 percent.

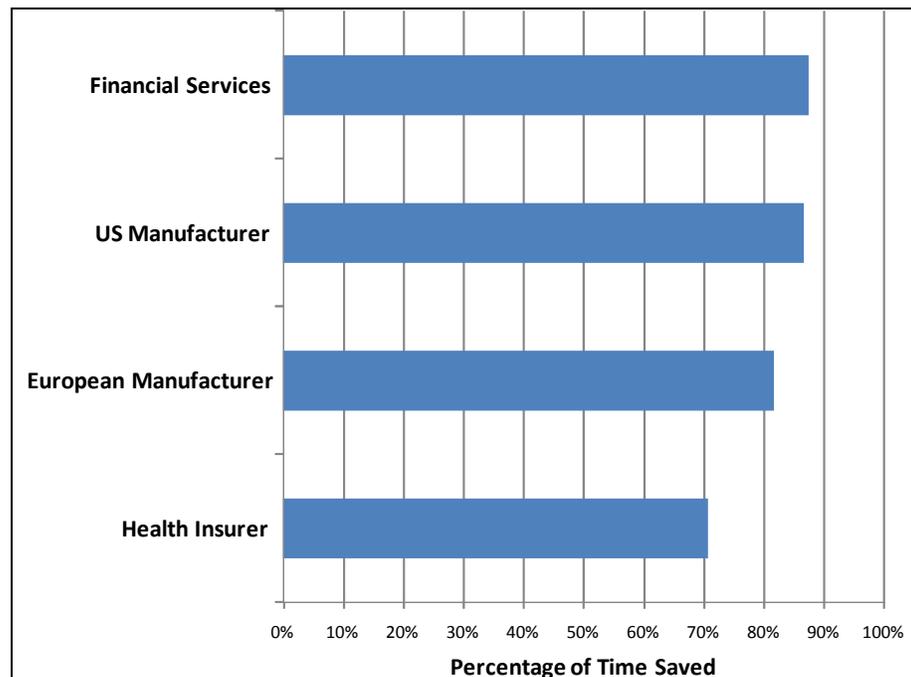


Figure 1 – Problem Resolution Time Improvements

The nGenius customers we interviewed value faster problem resolution because it enables them to manage their complex and dynamic environments more efficiently. Some firms interviewed have thousands of applications running over complex global networks, and gravitated to NetScout because it scales well in the number of links and numbers of applications it can support.

The European manufacturer we interviewed described a situation in which a critical application was performing poorly due to an LDAP authentication server problem. The company's network architect told us: "[The problem] was a major issue with a critical category one application that costs several hundred thousand dollars worth of down time per hour. We got it fixed within an hour, whereas, it would have taken [many] hours without [NetScout]."

The financial services firm interviewed supports business transactions for which sub-second response times are critical. The firm's network engineering manager described how NetScout has made a difference: "In our business as Ricky Bobby would say, "if you ain't first you're last". If we're there first we get the orders. We have an OC12 between two of our sites that was consistently hitting the top of our bandwidth threshold. It wasn't until we dived down into the application using NetScout that we could see we were sending some data streams four and five times. Since then we have reduced our WAN bandwidth by 150 Mb so we aren't hitting our ceiling—and this allowed us to process orders faster."

For the healthcare provider, which uses NetScout to monitor the performance of over 3,600 enterprise applications over a complex 800-site network, the ability to improve mean time to repair (MTTR) time has been vitally important. By way of example, the firm's network services planning and enterprise engineering manager described a recent situation in which: "Someone brought a new piece of equipment on the wire that was improperly configured, and it prevented an entire region from sending and receiving medical images to the medical image archive. Using NetScout we were quickly able to identify the problem and send information to local support so they could pull the [equipment] off the wire and restore service. Those kinds of things happen often."

"One of our applications had been having performance issues for years . . . After using [NetScout] probes for two weeks, we found the problem and got it fixed. All of a sudden the application that had been tremendously slow for two years, now works well."

Network Manager, Health Insurer

The firms we interviewed use NetScout to resolve chronic as well as acute performance problems. The network manager at the health insurer told us: "One of our applications had been having performance issues for years before we finally got involved. After using [NetScout] probes for two weeks, we found the problem and got it fixed. All of a sudden the application that had been tremendously slow for two years, now works well."

Improved Network Staff Productivity

The nGenius solution drove network staff productivity gains in all of the firms we interviewed. The companies found that nGenius reduced the network staff work load and helped determine the correct skill set needed to fix problems. The companies able to quantify their nGenius-enabled productivity improvements estimated staff savings in the 55 to 85 percent range (see Figure 2).

The network manager for the health insurer interviewed told us that due to nGenius their four network engineers can now do what would otherwise require dedicated network engineers at every site around the clock. He told us: “It improves our day-to-day function and makes us work together better as a team. Without NetScout we would have less visibility, and we wouldn’t be able to do our job the way we can today.”

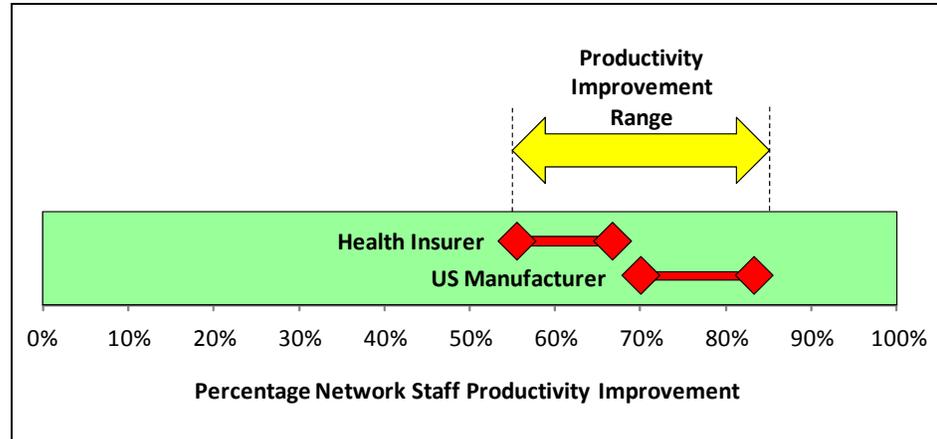


Figure 2 – Productivity Gains

Some companies we interviewed chose to use the newly freed up staff time to work on new projects and improve the operational environment, while others chose to reallocate people to new roles. Several companies told us that time previously spent fighting fires, is now spent on more proactive projects. For example, a network architect at the US manufacturer interviewed mentioned that before nGenius he spent more than 50 percent of his time keeping the network running and was only able to do longer-term project work at night—if then. He told us: “When everyone is stretched really thin you end up not doing things as you would like to do them if you had more time. I can now get to projects around new technology, and I have much more time to help other project teams that need our assistance. We now have time to do things right. This translates into greater up time, which translates into more dollars, and that’s good for business.”

Improved User Satisfaction and Productivity

All of the companies we interviewed told us that their end users are more productive and satisfied since the nGenius technology was deployed. Faster application response times and decreased service disruptions improve user satisfaction and productivity, which manifests itself in fewer help desk calls.

The European manufacturer told us: “If we didn’t have NetScout, it would have meant more calls to our service desk complaining about poor response time.” In their case user satisfaction also improved because nGenius enables the network department to provide internal customers with reports that give them a clear understanding of their network use and the value they are getting from it.

Improved Cross-group Collaboration

Most of the companies interviewed told us that the NetScout solution enabled them to improve collaboration across their enterprise as well as with their technology partners and network service providers. At the heart of this benefit is accurate reporting information that gives the IT group credibility and enables data to be shared with other groups.

This reporting information provides an accurate high-level view to upper management for more informed decision making; it enables diverse groups within the enterprise to mine data for a variety of purposes; it helps developers roll out better applications; and it helps ensure SLA compliance by network service providers.

The healthcare provider's network service planning and enterprise engineering manager told us that: "[Because of NetScout] we have become a source of truth for how the infrastructure is being used. NetScout gives us a lot of credibility within the organization."

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Network Service Planning and Enterprise Engineering Manager, Healthcare Provider

Thus far the firm has trained 185 people throughout the company to use the nGenius solution. This has stimulated collaboration across silos, which has in turn improved the company's ability to predict and accommodate growth trends and changes in infrastructure use.

nGenius reporting data has enabled more collaborative relationships with software purveyors for the European manufacturer we interviewed. The company routinely shares reporting information with vendors to assess performance. In a recent example, the company noticed that an application was performing poorly. The firm's network manager told us: "[The application vendor] refused to assist us because they said there was a problem in our network. But I could prove that there was a problem with the application [not the network]. After that, they got interested and did an analysis themselves." The network manager went on to tell us that only was problem resolved more quickly, the network staff was freed from the heavy time investment that would have been required to document the problem without NetScout.

The European manufacturer also shares nGenius-generated performance data with network service providers to help verify service level agreements (SLA) compliance. The company's network manager told us that at first service providers routinely disagreed with the data. But over time they have come to accept its accuracy, and have become increasingly cooperative and responsive.

The company also has found that "hard data" from NetScout has helped smooth relationships and build trust across the enterprise. For example, when centralizing servers throughout Europe as a cost saving measure, users within the regional offices expressed concern that performance would degrade. After the move, the IT group was able to use NetScout data to show that performance remained the same, and the transition proceeded smoothly.

Also worth noting is the role NetScout plays in building trust and credibility between IT and other groups. According to the health insurer interviewed: "We get a ton of thank you emails. We have points of contact for business applications who set up conference calls with different technical areas and business people—and the end result usually leads someone to the root cause of a problem. At least once a month we get a: 'Thank you engineer X for helping us solve this issue. It's been a real thorn in our side for a long time. He was great in leading the troubleshooting effort.' This wouldn't be possible without [NetScout], because of the time it would otherwise take to provide that same level of service."

NetForecast helps enterprises and vendors understand and improve the performance of networked applications.

Additional information is available at:
www.netforecast.com

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Other Benefits

In addition to the primary benefits described above, the nGenius solution provides a host of secondary benefits as well. The health insurer and the healthcare provider we interviewed both found nGenius beneficial for capacity planning. Using nGenius the healthcare provider improved its ability to predict and accommodate growth trends and changes in infrastructure use.

In addition, the healthcare provider regularly uses nGenius to enhance its security capabilities such as to perform forensic analysis and to provide audit information for HIPPA and PCI. The US and European manufacturers also improved security due to the nGenius solution. In particular, the European manufacturer was able to detect some viruses and worms using nGenius reporting capabilities.

Summary of Benefits

NetForecast's survey results show that the NetScout nGenius solution has become an indispensable tool in the five companies we interviewed. Without exception, all of the NetScout customers interviewed dramatically reduced problem resolution times by 70 to 90 percent. The companies also greatly improved network staff productivity by as much as 85 percent, and increased the satisfaction and productivity of application users. Once deployed, the companies all found nGenius delivered business benefits they had not originally anticipated.

Our survey results validate that streamlined problem resolution and improved staff productivity easily cost justify the NetScout nGenius solution. In addition, customers experienced less quantifiable benefits such as improved trust and collaboration across functional groups. Given mounting pressure to do more with less, all of these efficiencies can contribute greatly to business success.

About the Authors

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