WHAT YOU CAN’T SEE CAN HURT YOU: IMPROVING IT OPERATIONS WITH A COMPREHENSIVE APPROACH TO IT ANALYTICS

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Report Highlights

34% of businesses say they lack visibility into IT operations.

Organizations with an end-to-end IT operations approach are 25% more likely to use real-time monitoring.

Organizations with an end-to-end IT operations approach are three times more likely to reduce the time needed to fix issues.

Organizations with an end-to-end IT operations approach are 2.2 times more likely to have high availability for IT systems and services.

Aberdeen Group research shows that a key strategy that organizations can follow to bring order to IT operations chaos is to implement monitoring and analysis systems that have an end-to-end view of all systems and applications, and that can break down the walls between tools, to provide a unified and real-time view into all IT operations.
When a person has very good vision, they are typically described as having 20/20 vision. For this person, whether something is very close or at a distance, they can see it clearly and with good detail.

However, when it comes to how IT systems are operating, many organizations come up well short of 20/20 vision.

For IT operations at these businesses, there are many things that they can’t see clearly, or that they have no visibility into at all. And in the areas that they have visibility, they use multiple disparate and disconnected tools, preventing them from getting the complete picture of how their IT systems are operating.

This is an even bigger problem for large enterprises and technology-heavy businesses such as service providers, where the task of monitoring and understanding IT operations has become more complex and more difficult than ever before. These organizations are tasked with having to understand the activities of a large number of different systems, using an equally large and disconnected set of tools that don’t talk to each other, forcing IT operations to make sense of activities from a wide set of screens and analytics tools.

However, Aberdeen research has shown that a key strategy that these organizations can follow to bring order to this chaos is to implement IT operations monitoring and analysis platforms that have a complete, end-to-end view of all systems and applications, and that can break down the walls between tools, to provide a unified and real-time view into all of their IT operations. With this in place, the data shows that these organizations have high uptime, excellent performance, and are able to reduce costs and overcome the challenges of a modern IT operation.
Trying to Manage IT Operations with Blinders On

The growth of tools to monitor and manage IT operations can best be described as random and piecemeal. As often happens, over time, each distinct technology and system ended up with its own specific set of tools.

For a while, that worked OK. But as IT itself has become more agile, comprehensive, and automated, the need has grown for improved monitoring and management tools that provide end-to-end visibility into all IT operations.

And in this environment, having to deal with that classic set of disconnected and siloed tools isn’t just a hassle, it’s costing IT departments time and resources. As shown in Figure 1, this is leading to a number of key challenges that IT face today.

Figure 1: The Top Challenges to IT Operations

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-utilization of resources</td>
<td>36%</td>
</tr>
<tr>
<td>Lack the tools to monitor activity effectively</td>
<td>35%</td>
</tr>
<tr>
<td>Lack of visibility into IT operations performance</td>
<td>34%</td>
</tr>
<tr>
<td>Lack the proper metrics to measure performance</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group April 2016 Percentage of respondents, n=74
When we asked organizations to choose from a long list of challenges they face in their ability to monitor and manage IT operations, the top four responses were over-utilization of resources, lack of tools to effectively monitor activity, lack of visibility into IT operations performance, and the lack of proper metrics to measure performance. All of these challenges can be tied to not having a complete and end-to-end view of IT operations. In fact, lack of tools and visibility are direct results of having to deal with a siloed and piecemeal approach to monitoring and management.

And both the lack of proper metrics and over-utilization of resources are tied to not understanding how IT systems are being used. With an accurate, real-time, and end-to-end view into IT, businesses know which metrics are important to track, and understand how their IT systems are being used, which prevents over-utilization.

However, these challenges are not insurmountable. To overcome them, organizations need to grow their monitoring and management capabilities to meet the needs of modern systems, which means becoming more agile, real-time, and unified in their approaches.

*Getting an End-to-end View into IT Operations*

Everyone understands the challenges of not seeing the whole picture. Like in the fable of the blind men and the elephant, a limited view into something can lead to huge misconceptions.

This can be especially true in the world of IT operations. Lack of visibility into any area, whether it’s the network, servers, storage — you name it — can be a disaster, making it impossible to fix issues.
And if IT has visibility, but only through a large set of disconnected tools, it makes it hard for them to tie related issues together and see their infrastructure holistically.

In our research into IT management and infrastructure monitoring, we looked at organizations that take an end-to-end approach to monitoring and analyzing their infrastructure, compared to those that didn’t. And we saw some key differences in their use of important IT capabilities, as shown in Figure 2.

**Figure 2: Building an End-to-End View into IT Operations**
Looking at this data, we see that end-to-end IT management organizations are 37% more likely to monitor end-user experience of the services and applications delivered by IT, meaning that they know if users are getting value out of IT and being productive. They understand the value of automated and predictive systems to enable quick and effective fixes to issues as they are 33% more likely to leverage these types of systems. End-to-end IT operations are also 25% more likely to use real-time monitoring and to deploy unified and end-to-end IT operations dashboards. This means that the second an issue occurs, they know about it and can take action, and, by deploying unified dashboards, they remove lots of disconnected windows and have a more complete view into operations. Finally, end-to-end IT organizations are more likely to track the performance of their infrastructure, meaning they understand when IT is operating effectively and when they are underperforming.

However, the ability of these organizations to utilize effective strategies is just part of the picture. By implementing real-time and end-to-end IT operations, these organizations gain a number of key benefits.

Seeing is Believing: The Key Benefits of End-to-End IT Monitoring

We’ve seen that not having a complete view of IT operations can be a disaster waiting to happen — as more often than not, the areas of IT with less visibility are the areas where problems will occur.

And we’ve also seen that even a complete view can be a problem if it is achieved through a large number of disconnected tools and dashboards, as it makes it very hard to pull these tools together into one unified and actionable view of IT operations.
Businesses that are able to overcome these challenges implement a system that ties together all of these views and gives IT a comprehensive understanding of all IT systems and activities. More importantly, they leverage powerful, Big Data-style analytics that can effectively monitor and track this information so that IT can understand performance, find problems, and keep their organization’s technology running smoothly.

This is the main reason to implement end-to-end and comprehensive IT monitoring and analytics. By following these strategies and gaining complete visibility, these organizations gain a number of important benefits, including:

- They are **2.2 times** more likely to have high availability for IT systems and services, which means they have high uptime, meet service level agreements, and have a reliable infrastructure

- They are **2.6 times** more likely to have very low error rates for IT services, as their comprehensive and complete view into IT means that things are implemented correctly

- They are **40%** more likely to detect problems before they are deployed, meaning that their unified and real-time view lets them detect issues at all stages of deployment and keeps them from impacting end-users and the business

- When problems do occur, they are **three times** more likely to reduce the time needed to fix issues, as their end-
to-end view into the infrastructure lets them quickly find the root cause of issues wherever they occur.

This is why IT operations implement a comprehensive and complete monitoring and management platform. With these capabilities in place, they reduce costly downtime, make the best of use of IT resources, and reduce demand and the costs of building and maintaining an IT infrastructure for any business.

To move your organization to a more end-to-end and comprehensive IT operations deployment, consider these steps:

- **Remove IT tool silos and work to build a unified view into IT operations.** Trying to make sense of IT operations through dozens of different and disconnected screens is a recipe for failure, especially in today's complex IT environments.

- **Implement real-time monitoring capabilities.** Knowing about a problem minutes after it occurs is far too late. Real-time monitoring allows leading organizations to detect and fix problems before they impact users and the business.

- **Take a Big Data approach to IT analytics.** In the business world, Big Data has allowed companies to successfully find vital information in a flood of data. When it comes to IT operations, these same approaches can provide deep insight into how your infrastructure operates, whether it is a large enterprise, a service provider, or a cutting-edge technology firm.

- **Get automated and predictive.** The gold standard for managing IT is to prevent problems before they actually become problems. With predictive analytics tied to
automated systems, successful organizations find and fix issues before they impact the business.

It doesn’t take 20/20 vision to see that anything short of complete visibility into the infrastructure is unacceptable for IT operations. By getting the complete picture of how their systems work, leading organizations can see all, know all, and have the ability to fix anything that comes their way.

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- **Building Agile Ops with a Proactive and Unified Infrastructure Management Approach**; March 2015
- **Boost Application Performance with End-to-End Visibility and Optimization**; May 2015
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