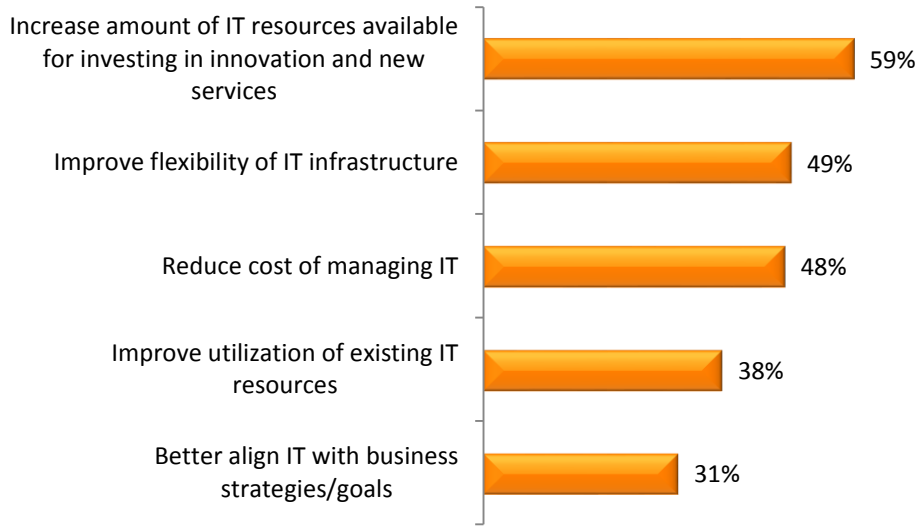
CIO's View of Application Performance Management

Based on 2011 TRAC survey results
Prepared for Dell

Introduction

As the CIO's role in the modern enterprise has become increasingly complex and dynamic, a core part of the CIO's responsibility remains constant: the need to create competitive advantage and generate new revenue streams through innovation while keeping cost at an optimal level. However, many organizations are allocating extensive IT resources to the daily operational struggle of "keeping the lights on", which deteriorates their ability to support the growth of the organization through the selection, development, and implementation of new technologies. CIOs are feeling the increased burden of daily IT tasks, while a recent survey by TRAC Research shows that the top rated key strategic goal of CIOs is to increase the amount of IT resources that are available for investing in innovation and new services (59%), while the third highest rated goal of CIOs is to reduce the cost of managing IT (48%). This indicates that CIOs are mainly concerned with minimizing the cost of operating IT, in order to maximize the amount of new innovation they are able to get from their investments in IT resources.

Figure 1: Key Strategic Goals of CIOs



Source: TRAC Research, 2011

Application Performance Management (APM) technologies can provide significant help in dealing with the key tasks on the CIOs agenda. The key values of deploying APM technologies are:

- Increasing productivity by isolating and repairing the root causes of application performance issues
- Detecting potential performance problems before they impact end-users
- Measuring the impact of application performance on business goals, such as increased revenue by delivering web content quickly
- Reducing time to market while improving user experience in order to better align IT resources with overall business goals

TRAC's research shows that organizations that are able to effectively execute on their APM strategies are able to manage 3 times more business users per help-desk full time employee (FTE). Additionally, the research shows that organizations that do not have full APM capabilities have their IT staff spend an average of 46.2 hours each month in "war-room" problem resolution escalation meetings. The right mix of APM capabilities can substantially reduce the time that IT must spend on isolating and repairing application performance issues, especially if the enterprise implements proactive monitoring to prevent problems from affecting end-users. The result of an effective APM implementation that identifies application problems quickly is lower overall IT costs, measured in fewer resources dedicated to the help desk and man-hours spent in "war-room" meetings, as well as a higher quality of end-user experience, application availability, and productivity, which can result in higher revenue.

Increasing Productivity by Isolating and Repairing the Root Causes of Application Performance Issues

APM technologies are critical for maintaining employee productivity. Poor application performance or availability results in disruptions of business processes, with the result that end-users are not able to complete tasks that these applications are supporting. Furthermore, streamlined application performance and availability increases application adoption and reduces end-user frustration or application abandonment. APM allows IT professionals to detect these problems preemptively, maintaining business continuity and preventing interruptions.

Isolating and repairing the root causes of application performance issues has a direct impact on the overall cost of IT and the IT resources that are available for investment in innovation and new services. By addressing the root causes of application issues, application administrators can prevent a single problem from reaching end-users repeatedly and by reducing the costs associated with supporting those applications, budget can be freed up to be invested elsewhere and to fuel innovation for constrained IT organizations.

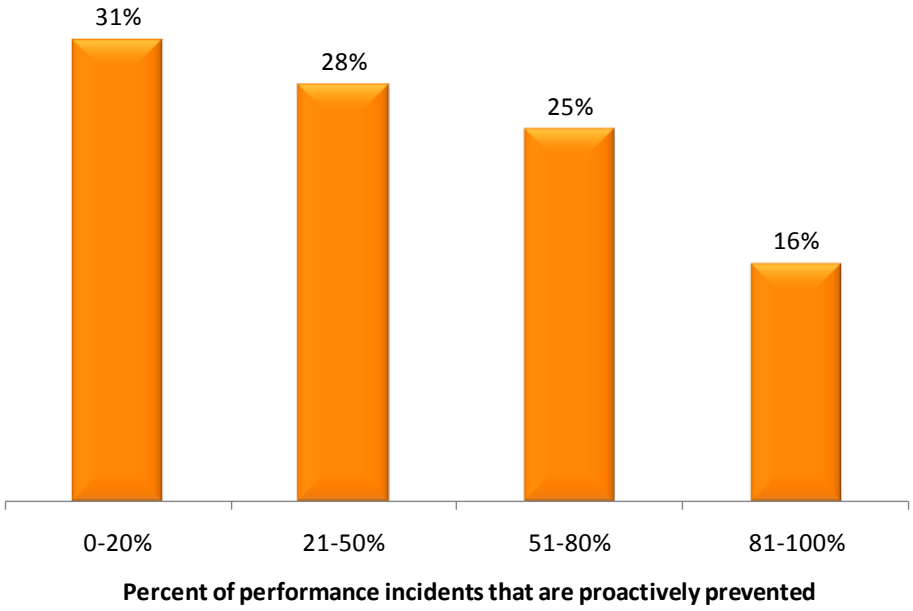
In order to address the root cause of application performance issues, enterprises need a high granularity of data that gives a holistic view of the entire organization. Enterprise IT applications and the tools to manage them are often application specific and are not designed to interact with one another, which means that challenges to visibility can occur when data is sent from one silo to the

next. In order to prevent and address these issues, IT operations staff needs diagnostic tools that give a view of the entire organization and how transactions behave as they move through it.

Detecting Potential Performance Problems Before They Impact Business End-Users

Many APM solutions are designed to proactively detect application performance issues before they affect end-users. An issue is much more costly to solve once it has reached an end-user than before, both in terms of resources spent to resolve the problem and in the perception of the end-user, who is oftentimes a customer and a source of revenue. TRAC's research shows that only 16% of organizations are able to proactively prevent performance issues for 80% or more performance incidents. Proactive APM measurement allows organizations to mitigate the negative business impact of issues with application performance and be able to manage more business users with less IT staff.

Figure 2: Success Rate in Preventing Performance Issues Before They Impact Business Users



Source: TRAC Research, 2012

As organizations are looking to modernize their IT infrastructure and make it more flexible, the ability to track application transactions across distributed environments is becoming more important. APM solutions that are based on a transaction-centric approach give organizations a holistic view into how applications are delivered to end-users even in highly distributed application infrastructures. This approach also allows organizations to quickly isolate IT components that are causing performance

issues and reduce time needed for repairing these problems, in some cases preventing performance problems completely before they can impact end-users.

Measuring the Impact of Application Performance on Business Goals

The day-to-day maintenance and support of IT can divert substantial resources away from innovation and strategic IT investment. Without effective application performance management, not only are IT resources wasted, but the company's ability to reach some of its key business goals could be deteriorated as well. A proper APM solution can prevent these problems, keep the IT staff effective and innovative, increase productivity by reducing downtime and keep end-users satisfied with their overall experience.

Figure 3: Business Impact of Application Performance Problems

Source: TRAC Research, 2011

Similarly, a poor user experience can prompt web customers to abandon an application or website which can cause a loss of direct revenue opportunities, productivity, and negatively impact business goals. Proactive monitoring of application performance can prevent these issues before they even have an impact on the end-user and, as a result, the business.

APM solutions are increasingly including advanced analytics capabilities that allow organizations to access APM data in the context of a performance problem that they are trying to solve. This allows IT professionals to make faster and more educated decisions. The result is more efficient use of an

organization's IT resources and reduced cost of IT, requiring fewer FTEs and fewer overall resources dedicated to troubleshooting routine problems.

Reducing Time to Market While Improving User Experience

Many APM solutions are equipped with automation capabilities which reduce the IT resources needed to manage the performance of applications and launch net-new applications to market. By automating tasks that would normally take human interaction, those same resources can be applied to innovating new services and delivering them to market.

APM can improve end-user experience by using predictive analytics to determine what applications end-users will most likely need to access soon. Knowing what applications end-users are going to need to access can help an enterprise deliver a superior end-user experience by making more effective use of its IT infrastructure, flexing resource utilizing based on predicted user requirements.

End-user experience can also be improved by deploying APM technologies in both product pre-production and production phases. This will enable issues to be detected long before the product gets into the market, preventing a situation where an application problem is identified by its initial adopters. The result is that more time can be allocated to product improvement and innovation rather than rebuilding existing product to eliminate problems, both improving time to market and improving end-user experience.

Summary and Key Takeaways

For many CIOs, APM has become an important asset in effectively supporting their IT staff. With a powerful APM technology solution in place, IT's limited time and resources will not be constantly engaged in troubleshooting, tracking issues and reactively addressing application problems. Instead, APM allows resources to be focused on increasing business productivity and on assignments that innovate and create value for their organization. APM tools are one of the ways that CIOs will enable innovation in IT, while maximizing their budgets across existing and future IT goals.

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