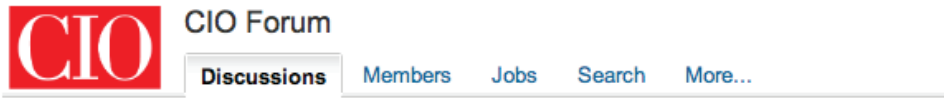
WHITE PAPER

CIOs Feel the Pressure to Optimize the Online Experience

CIO FORUM on LinkedIn



In an exclusive survey, members of the CIO Forum on LinkedIn have weighed in on the business impact of application performance. These CIOs and IT leaders say they directly associate application performance with end-user and customer satisfaction, along with the potential to increase productivity and lower costs. Based on this research, the LinkedIn participants have provided ammunition and guidance toward building the business case to optimize the customer experience via well-performing applications.

OVERVIEW

In today's technology-driven marketplace, applications are often a customer's frontline experience with a company—driving impressions and influencing actions. The expectation is that applications will perform flawlessly.

ca technologies

Top driver for application performance management:

58%
Demand for IT accountability

52%
Economic pressure
(cost savings and ROI)

"Stressing how you are providing customers with function and features is fine, but it is important to keep in mind that they are meaningless if performance and availability do not rise to the surface. There is a need to appreciate the customer experience."

—IT executive for a health care organization

This puts pressure on CIOs and IT leaders to shift their priorities, according to an IDG Research Services survey of IT executives who are qualified members of LinkedIn's CIO Forum. While still working toward application availability, the survey respondents are focusing on ensuring excellent application performance.

And yet they are struggling to achieve end-to-end visibility into application issues and provide meaningful insight into the health of IT services. Fortunately, tools exist to close the gap—enabling IT leaders to increase end-user satisfaction and productivity while reducing costs.

Fulfilling Business Requirements

CIOs get that the customer is king. When asked what they consider the top driver for application performance management, 65 percent say end-user/customer satisfaction. Next in line is satisfying the business; other drivers include:

Demand for IT accountability: 58 percent
Economic pressure (cost savings and ROI): 52 percent

Another critical driver: productivity. Consistent application performance and productivity go hand-in-hand, says one of the IDG survey respondents, an IT executive in health care. Busy doctors have little patience for underperforming applications; "if performance is not there they will move on," he explains. He equates this to lost opportunities in getting work done.

To get that work done, CIOs emphasize the need for visibility across applications. Two-thirds of respondents rank the ability to trace business transactions from end to end as very important. They also say it's critical to have visibility when monitoring and measuring the online user experience. In fact, this need intensifies as IT leaders assess application performance issues across IT environments, with 88 percent saying it's important to be able to do so across physical, virtual and cloud environments.

"Whether your most important Web application users are internal colleagues or external customers, your company's productivity and revenue depend on their online experience," says Chris Cook, general manager of the assurance customer solution unit at CA Technologies, a leading provider of enterprise application management solutions.

These issues tie back to the key benefits IT leaders and CIOs say they are looking to gain from an application performance management (APM) solution:

- increased productivity
- problems resolved *before* users are affected
- higher service quality/SLAs met
- closer alignment with business objectives/improved IT value

Here again, real-time visibility is a significant issue. After all, whether the customer is internal or external, being able to understand performance issues provides IT with an invaluable opportunity to monitor, modify and maintain applications before they become unproductive or lead to undesirable consequences.

"From an IT operations perspective, having visibility confirms whether a given application is fully utilizing the hardware platform, allowing more effective sourcing of server and workstation resources," says the CIO of a national residential real estate developer. "It's crucial when trying to achieve better use of business dollars and faster, more accurate ROI. And from the perspective of supporting the business from within IT, application performance metrics give the IT staff further insight into bottlenecks and possible variances of perception by the users."

Big Picture

As CIOs work to improve the customer experience, there is no escaping the fact that IT is increasingly measured by its relationship to revenue, employee productivity, business success, and the ability to adapt to change. As a result, progressive IT leaders appreciate the big picture perspective that a comprehensive Service Assurance solution provides.

"Application performance management is one of the key tenets of a comprehensive Service Assurance approach where end-user experience, transactions and services are linked to the underlying network and systems infrastructure, so that IT focuses on what matters and understands the impact of their actions," says Chris Cook, general manager of the assurance customer solution unit at CA Technologies, a leading provider of enterprise application management solutions.

Service Assurance uniquely allows you to understand the real-time performance, risk and quality of business services across your physical, virtual and cloud environments. Service Assurance can help you:

- Increase agility, which helps optimize revenue and enhance productivity.
- Gain greater IT value and relevance to core business objectives.
- Prioritize actions based on business impact and SLAs.

Another advantage of having clear insight into the health of applications and systems is improved IT effectiveness, says the director of information systems for an international construction management organization. "Having clear visibility into application performance gives users a perception that IT cares about them," he explains. "Therefore they feel more responsible and motivated in their tasks, which ultimately translates into increased productivity."

Closing the Performance Gap

Although IT leaders recognize the need for and the benefits of achieving consistent application performance, a gap exists between that acknowledgement and actual performance. For example, although companies consider online customer attraction and retention highly important, only 35 percent are very confident in their company's ability to meet user expectations with regard to application performance.

"We find our customers are served best by an application performance management solution that understands the end user and transaction first, so the business context is at the forefront," says Cook.

The IDG survey results reveal that companies lag in their ability to meet objectives around monitoring and maintaining the online customer experience:

- The biggest gaps exist in proactively detecting application issues and problems, tracing business transactions from end to end, and performing root-cause analysis.
- IT organizations stumble when performing root-cause analysis, and blame analysis tool maintenance costs and the lack of a common data source.

"Although technology can be complex and it is hard to know where the problems exist, this does not negate the need to accurately identify problem areas," says the health care IT executive. "When you have a complex series of technologies working together, you need to have end-to-end monitoring in place based on the customer experience. This often means we need to be able to step outside the IT world to understand the end-to-end experience."

One reason for these gaps is an overriding inability to measure the true impact of poor application performance. This is the case for the construction management CIO, who only recently began taking small steps toward mitigating the problem. "We are starting by gathering some key performance indicators related to IT performance and trying to correlate them with the organization via the quality certification systems [ISO 9001 and Six Sigma] we have adopted organization-wide," he says. "Unfortunately, I don't yet have a lot of concrete results, but I have gathered examples of how poor application performance is directly connected with process performance."

The real estate CIO is in a similar situation. Although his firm cannot accurately measure the results of poor application performance, the IT department is working to enhance its infrastructure to better support that level of measurement for various business groups. One of his primary challenges is trying to break the habit of simply adding more servers to speed up the statistical modeling application his firm is using.

"Our current execution time is over six hours based on the volume of data we're analyzing each day," he says. "Adding more servers because that solution can only utilize one core/system is counterintuitive to the direction of the processor development on all the new hardware we're buying."

CIOs and IT leaders say the results of online application problems have included loss of

employee productivity, the inability to obtain information for critical decision-making, and escalating costs associated with resolving problems. For the construction management CIO, poor application performance meant struggling through a month when the firm could not process all of its invoices, leading to a lack of cash entering the next month. "Although this situation was temporary, it had a noticeably detrimental impact on business operations because our cash flow was significantly inferior to the amount that we could have if the application had the desired response," he says.

The health care IT executive noticed doctors avoided using poorly performing applications. He found some resolution by embracing a dashboard solution designed to examine how key processes are used, then monitoring the user experience and measuring changes in processing times. "This way when processes slow down, the opportunity exists to step in and make changes before it has a devastating impact of losing the customer," he says.

Getting Business Buy-in

History shows that successfully addressing areas of concern and properly managing application performance requires ongoing investment and buy-in from the business. To build a winning case, CIOs and IT leaders say they must highlight these benefits:

- increased productivity
- improved end user/customer satisfaction
- cost control/savings
- better ability to support plans for business growth

"There is a real need to focus more on optimizing our customers' perspective and experience since these are terms that business management counterparts can appreciate," says the health care IT executive. "Stressing how you are providing customers with function and features is fine, but it is important to keep in mind that they are meaningless if performance and availability do not rise to the surface. There is a need to appreciate the customer experience, and unfortunately we do not invest enough in this area."

The construction management CIO recommends demonstrating how application performance directly connects with key business drivers such as maximizing revenue and controlling unnecessary costs. "Make some easy calculations, and present the results of having poor performance applications to your organization," he says. "Let them decide if they can live with it. People understand and appreciate numbers when you can tie them to real-life examples."

Helping business peers understand the ramifications of application performance is always challenging, says the real estate CIO. "Our job as the leaders of our IT infrastructure is to find analogies and hard facts that help the other business units understand what the potential performance issues are actually costing both their business unit as well as the company as a whole," he says. "Keeping the amount and style of information balanced while not overburdening [our] executive peers, all while demonstrating the flexibility to adjust to [their] varying needs, is why we as CIOs hold key chairs at the table."

When IT leaders fail to address budget requirements with non-IT stakeholders, the results can be dramatic. Not only do their companies fail to enjoy the business benefits, poor performance also inflates the IT support and maintenance budget, while limiting the ability to use applications for sustainable competitive advantage.

"The status quo is not good enough in today's market," says the construction management CIO. "Not asking for this type of investment ultimately means you accept poor performance."