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Improving CX through Effective, Efficient Digital Asset Performance Monitoring

Market
Pulse

The tech stack, from apps to underlying infrastructure, has become exponentially more complex and difficult to understand. That's a problem for business leaders, because, in a digital age, digital asset performance is the foundation for a great customer experience (CX).

Today, the demand to deliver superior CX can make or break a company. According to a report from PwC, 59% of U.S. customers will leave a company or product that they love after several bad experiences, and 17% will leave [after a single bad experience.](#)

CIO

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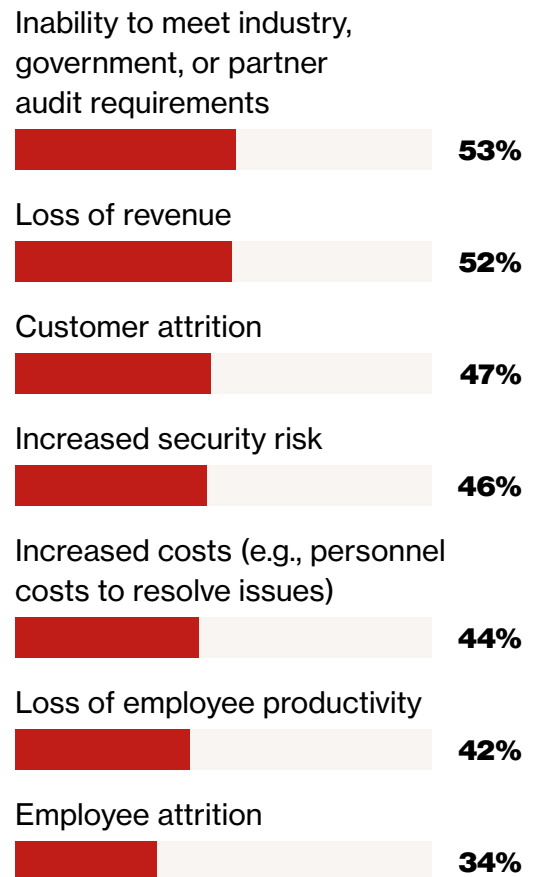


NTT wanted to better understand how organizations prioritize digital asset performance, how they are monitoring and observing performance, and how digital asset performance management is being used to improve the user experience. To this end, NTT partnered with Foudry to conduct a survey of 111 IT decision-makers (ITDMs) from organizations in a wide range of industries. Nearly all (99%) had 1000 or more employees, and 39% had more than 5000. More than three-quarters (76%) of the ITDMs had a C-level title.

The User Experience and Digital Asset Performance

Most enterprises experience negative business impacts due to poor CX, and the issues that arise from a poor CX are all interrelated. For example, the No. 1 issue is an inability to meet industry, government, or partner audit requirements (53%), a problem that can lead to the No. 3 issue of customer attrition (47%) and, subsequently, the No. 2 problem of loss of revenue (52%). There are internal issues as well, with employees losing productivity (42%) and employee attrition (34%). Additionally, security risks due to lack of

Figure 1 | Organizational impacts of poor user experience with digital products and services



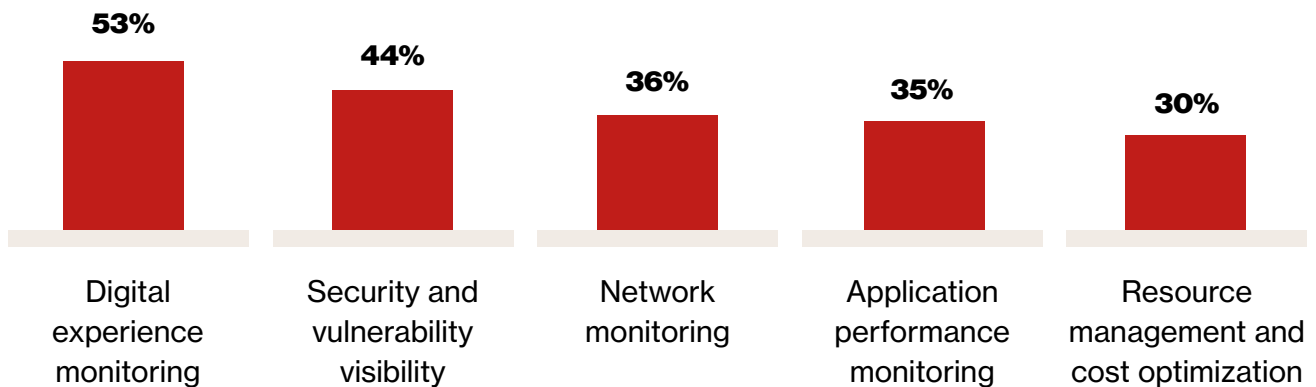
SOURCE: FOUNDRY

observability are a concern for nearly half of the respondents (46%).

Enterprises also understand that monitoring the performance of digital assets is paramount to understand-

Figure 2 | Top observability use cases in the next 12 months

Observability refers to the filtering and correlation of data across multiple services and applications to help IT operations teams quickly understand the business and user impact of infrastructure, cloud, network, and application performance problems. (Source: IDC)



SOURCE: FOUNDRY

ing and supporting digital experiences – 100% say this is a high or critical priority. And, not coincidentally, the top observability use case over the next 12 months is digital experience monitoring (53%), further highlighting the importance of digital asset performance to providing a great CX. Even more interesting, digital experience monitoring topped what is often the No. 1 concern for IT organizations: security and vulnerability, which was No. 2 at 44%.

The challenge of maintaining visibility over the full stack is evident in the distribution of concerns across

network monitoring (36%), application performance monitoring (35%), and resource management and cost optimization (30%).

Concerning the benefits ITDMs expect to see from improved observability, the top perceived benefit relates to strengthening visibility for security vulnerabilities (57%), which is in line with expectations – security is nearly always a top priority for enterprises in most technical endeavors. But a similar percentage also expects to see benefits for the workforce:

- **Improved employee productivity (54%)**
- **Improved customer and employee experiences (52%)**
- **Reduced burden on IT support teams (50%)**

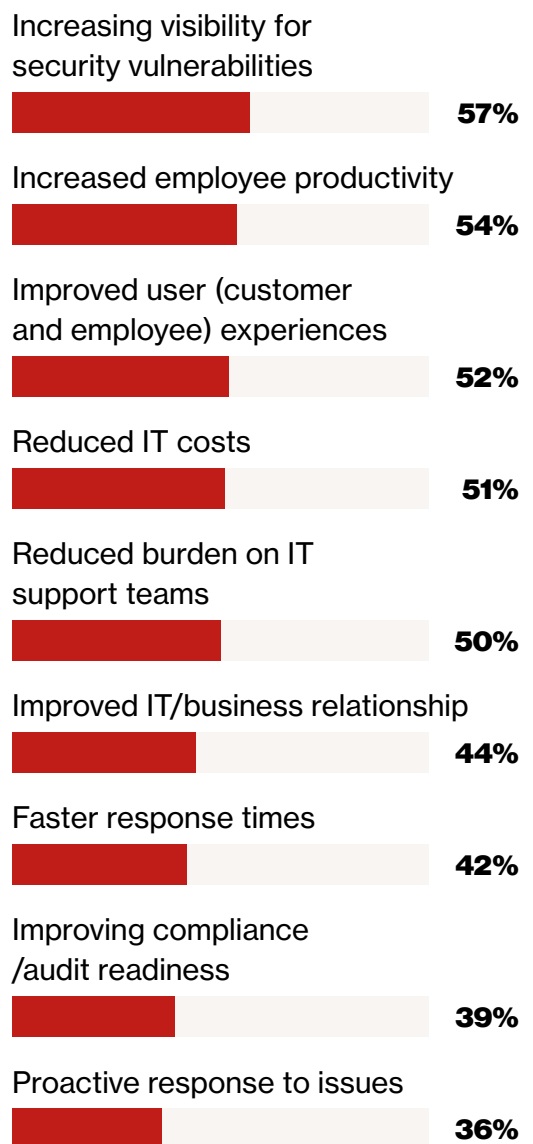
And, of course, they expect to see IT costs go down (51%)

Challenges to Achieving Observability

Unfortunately, though they understand its importance, ITDMs at large enterprises find it challenging to measure the impact of digital asset performance on business outcomes. Nine in ten say it is very or extremely challenging. ITDMs also struggle to get a holistic picture of digital asset performance and health (88% said it's very or extremely challenging) and to understand the root causes of user transaction issues (61%).

What's more, the sheer number of tools IT is using causes confusion and complexity. On average, organizations use 17 different tools and solutions to monitor digital asset performance and health. In fact,

Figure 3 | **Most appealing potential benefits of improving observability into business and operations**



SOURCE: FOUNDRY

80% are actively trying to reduce and consolidate the number of tools they're using. Using multiple tools can create several problems, the biggest of which is that IT can't get actionable insights from monitoring data (65%). Survey respondents also report spending a lot of time on false positive alerts (44%), and, ironically, despite the high number of tools they already have, more than half (54%) say they still lack the tools and technologies they need.

As a result of these challenges, IT issues require a significant number of internal resources and time to resolve. In the average organization, 27 responders are involved in identifying and resolving major performance issues, and one-third (34%) say it takes at least several hours to resolve a major performance issue. Even worse, for nearly 1 in 6 (15%), it typically takes days or even weeks to resolve them.

Nearly all (99%) say there is room for improvement regarding their ability to identify and resolve digital asset performance issues before users are affected. Nine in 10 place critical or high importance on the ability to do this. Additionally, survey respondents want to be able to prioritize perfor-

mance issues and problems according to business impact (90%) and link user transaction issues to digital asset health and performance (83%).

The lack of observability for digital asset performance is challenging because it spans so many different elements of IT. Vendors often convince IT that the solution lies in buying another tool, and while technology is part of the solution, the data shows that IT already has trouble managing the many tools already in hand. To see real progress, ITDMs need to look at all three of the elements that make observability a robust capability: people, process, and technology. People and how they form the overall organizational structure of IT is the most important, followed by the processes that support incident, problem, event, and change. Technology gaps must be closed, but technology's impact is greatly diminished without addressing people and process.

Overhauling people, process, and technology to improve observability is challenging, and few enterprises have the resources or expertise. Plus, it's always hard to see what needs to be changed from the inside of an organization. That's why

working with a trusted partner who has the essential expertise can make an enormous difference, enabling organizations to drive out waste in processes, identify where there are skills and personnel gaps, and consolidate point solutions with comprehensive, intuitive tools.

How a Global Manufacturer and a Large Cruise Line Achieved Observability

To illustrate how third-party organizations can help IT improve observability, we'll look at two examples. In the first, one of the world's largest food manufacturers was in the midst of migrating its enterprise resource planning (ERP) from an on-premises deployment to the cloud. During this migration, the company started experiencing serious application slowdowns in their factories. The company's ability to rapidly move product from the line to a palette and on to the customer was a key differentiator, so this poor application performance was a major problem—and every wasted minute racked up huge expenses. This is a great illustration of how application perfor-

PHOTO BY JACOB LUND



mance is business performance. The manufacturer was unable to pinpoint the cause of the slowdown, whether it was the network, the data center, or the app itself.

Working with NTT and Cisco, the manufacturer brought the right level of observability through wireless networks to the cloud and the ERP platform so they could determine the source of the problem. Support teams could now see both the application and network in one view. And in this case, they could see the ERP application was performing well. This enabled them to focus attention on the right area, and in the end, it turned out to be a routing issue. Problem solved.

In our second example, one of the world's largest cruise lines needed a way to ensure application availability onboard their ships, which rely on satellites to provide internet connectivity. It was critical, because

their entire CX, booking for crews, information on crew status, ticketing – essentially all the ship’s operations – relied on web apps. Even on board, shipboard apps on passengers’ phones enable them to communicate, order services, update ticketing, and much more.

NTT helped the cruise line deploy Cisco AppDynamics, which enabled the company to very quickly track down and stamp out issues in the environment. With this solution in place, the cruise line can now proactively understand and resolve issues before they affect the customer.

NTT and Cisco: Partners for Observability

NTT can help organizations adopt the methodology that mature companies use to measure performance: tracking the number of open incidents, the number of problem tickets opened, and system performance. When the process goes well, organizations see a reduction in repair times. NTT experts can identify poor change management processes, where there are gaps in staffing and skills, and what capabilities might be missing in tooling.

In short, NTT knows what a mature organization with strong, deep observability looks like, so they have the expertise to guide other companies on their journey to get to that same place.

When it comes to tooling, Cisco provides two primary solutions that can supplant point solutions while also filling capability gaps.

- **AppDynamics is part of the overall observability tool set, and delivers application performance management – it provides IT with a view from inside the app. It’s installed in a way that allows IT to see all the way down to lines of code, and clearly understand how applications are behaving.**
- **ThousandEyes helps businesses and IT see networks they don’t own or control. It can see what’s happening hop by hop through the open internet or home networks, so businesses can quickly determine whether it’s the app or a network issue. If it’s the network, the tool quickly pinpoints where the problem lies.**



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Finally, if an organization wants to outsource observability and monitoring, NTT and Cisco can help. NTT's 360 Observability service, powered by Cisco Full-Stack Observability, moves beyond domain monitoring with a fully integrated approach to application performance, digital experiences, and multi-cloud infrastructure. This service provides proactive, insight-driven innovation and transformation so organizations can continuously improve both customer and employee experience.

Observability is critical to ensuring application performance and, consequently, a high-quality customer experience. By working with

organizations such as NTT and Cisco that possess expertise in this area, businesses can move more rapidly on their journey to flawless CX. ♦

Learn how to improve CX with [NTT's Visibility Performance Observability Workshop](#).