Reactive to proactive to predictive — the new IT user support paradigm
Understanding a new support strategy
Today’s workplace is more dynamic and complex than ever. Armed with an increasing number of devices and applications, mobile workers must deliver productivity and value anywhere, anytime, from any device. Is your support service helping or hindering them?

Reactive user support might resolve employees’ issues, but it won’t surprise or delight them. Imagine solving a problem before the employee calls. Even better, predict and resolve an issue before the employee is even aware of it.

In today’s more mobile and digital workplace, employees expect and demand IT support that is fast, reliable and easy to use. You may have already tried to reduce call volumes or queue times, offer call-back options, provide self-service and even provide more personalized, convenient ways for employees to get support. However, the ideal scenario is to prevent employees from ever needing to ask for help in the first place. That’s exactly what happens when companies use analytics to predict issues and implement proactive user support.

**The importance of moving beyond reactive support services**

No matter how good they are, standard user support processes are largely reactive, providing assistance only after the event or disruption happens. Accessing support services is often time consuming and the experience so poor that many employees choose not to report situations and instead, suffer in silence. The cost to business productivity and user morale and confidence is difficult to quantify but is known to be considerable.

Mobility, outsourcing, software as a service and cloud-delivered services have made it harder than ever to understand your users’ issues and how they experience business services. It’s even harder to understand and quantify the impact those services have on their productivity. Although “the lights are on,” the business user is unable to function productively — a situation many IT shops now find hard to measure, diagnose and resolve.

Being reactive is no longer an option most users accept. Truly happy business users (or consumers) are those who have uninterrupted, responsive, reliable access to the systems and information they need. (See Figure 1.) Processes such as ITIL, service desk incident and log checking, and root cause analysis are reactive responses. What if you could identify issues in complex IT infrastructures and diagnose developing issues early? This requires a move from reactive to proactive support: Identify emerging situations, slowing services, failing devices and users who are or will be affected. Now you can take proactive steps to prevent negative consequences.
Why consider a proactive approach to user support?

A proactive approach to support can pay big dividends. Employees are more productive, satisfied and confident about IT. Preventing business disruption is more than making sure that back-end systems are well designed and maintained. More and more business services are delivered “off-premises” in the cloud and across multiple vendors. This is where using analytics to gather information on potential issues can help you “see into the future” and predict potential disruption. Now your proactive support model can ensure that users are spared disruption. In addition to creating happier users, this approach will drive greater efficiency from IT support staff.

Benefits of a proactive approach

A well-defined proactive and preventive service model will significantly improve overall IT performance and user satisfaction. Using a combination of 24×7 monitoring technologies, you can analyze events to show the real-time state of devices, user activity, locations, applications and business services involved. You can analyze and act on these live, user-centric metrics immediately. And you can prioritize actions to minimize negative user impact.

The saying, “a stitch in time saves nine,” has never been more true. Imagine the delight when users receive a call, instant message or email alerting them to potential trouble and giving them instructions on how to avoid or react to it. More important, imagine the incident-reduction statistics when you now have data that lets you reach out to other organizations with recommended changes that will reduce negative user impacts. Table 1 provides a comparison of reactive, proactive and predictive approaches.
User experiences an IT issue
IT analytics monitor network, services and devices 24×7
Synchronous real-time intervention is based on continuous monitoring and analysis

User contacts support organization and describes an issue
Alerts provide data about developing issues
Predictive analysis identifies and then attempts to prevent service-impacting events

Many issues may be escalated for onsite dispatch
Proactive services may reach out to users — before an issue occurs — with warnings, resolution or directions for prevention that can remediate the issue with little or no disruption
Predictive operations such as dashboards, automated diagnostics and early focus allow quick action

Resolution has SLAs that impact productivity for hours
Many issues go unnoticed by users, with little impact
IT performance and availability are not impacted

How predictive analytics help your business
The cost of even a short outage of business systems is high. It has been reported that even 10 hours of downtime in a year can result in costs of up to $125,000 for a small to midsize business. For large enterprises, that cost reaches far into the millions.

Adopting predictive analytics can help you realize significant improvements in system performance, avoid outages that might otherwise be unavoidable and keep your employees productive.

Advanced analytics help identify root causes
Organizations use predictive analytics to look at probabilities and trends, measuring variables to predict how something will behave. Advanced analytics capabilities include ad hoc statistical analysis, predictive modeling, data mining, text analytics, optimization, real-time scoring and machine learning. Using predictive analysis, organizations can analyze recent and historical outages to determine root causes so that strategies can be developed for preventing reoccurrence and future downtime.

Machine learning allows us to more accurately and efficiently identify where technological assets are underperforming or find faults that could lead to downtime. Machine learning can determine “normal” behavior or performance levels. Predictive analytics can then identify patterns or anomalies across the systems on the corporate or even public networks to predict when an issue is likely to occur. The more analytics that are accumulated and analyzed, the better the predictive capabilities become.
Four steps to predictive analytics

Here are four steps to make predictive analytics work for you:

1. Clarify your goal and identify the most relevant data.

2. Prepare the data and determine your predictive model. Once the data is consolidated from multiple sources into one analytical dataset, you can select the algorithms that best match your goals. Test your algorithms with small subsets of the data until you have the best model.

3. Deploy the model using all the data collected.

4. Monitor the model’s effectiveness for ongoing analysis.

Over time, the data fed into predictive analysis systems can degrade in accuracy. Adjust the model by collecting and entering additional data or adjusting the algorithms used.

Using predictive analytics to forecast the likelihood of outages is vital for smooth-running operations. Not only is downtime costly to fix, but valuable resources are inevitably diverted to reacting to events rather than conducting more valuable activities such as improving the overall performance of IT systems and support teams.

Moving to proactive and predictive user support

DXC Technology leads in delivering new IT support methods that drive better user experiences and cost outcomes than traditional, reactive support methods.

Combining experience, know-how and technology is a solid formula for transitioning to a new user support state. DXC uniquely blends well-defined and top-rated global IT service delivery with investment in new technologies and services to redefine how user support delivers value in the modern enterprise.

Tools alone are not the answer, though. Technology needs to be coupled with proven experts who are well-trained and committed to improving the user experience.

Proactive IT support and solutions provide a far greater return on your investment than reactive support. Predicting and preventing problems from occurring — at a fraction of the cost and disruption to recover from outages and failures — just makes business sense. ([See Figure 2.](#))

*Figure 2. Predictive and proactive support model characteristics*
IT issues are unavoidable; however, proactive user support from DXC enables businesses to foresee problem areas, reduce costs and implement remediation and fixes before the problems cause significant loss in overall business productivity and results.

Proactive user support delivers benefits in six areas:

1. **Decision making**

   DXC proactive IT support with user analytics gives businesses the insights needed for effective planning and analysis. You can answer key IT questions such as:
   
   - How and which applications are being used and by whom? — to evaluate license usage and optimize costs
   - What is the overall security and compliance position for users and their devices, whether corporate owned or bring your own (BYO)?
   - Are devices at optimal health?
   - When and what do we replace?

2. **Budgeting and planning**

   Proactive user support and analytics provide deeper insights through monitoring, continuous health checks and more effective use of scarce IT resources.

3. **IT support cost savings**

   “An ounce of prevention is worth a pound of cure” holds true in IT support. Not only is prevention more cost effective, but employees exhibit higher morale and confidence. The latter may be difficult to quantify in concrete savings but is nonetheless real.

4. **Uptime**

   DXC proactive monitoring and analytics can easily identify areas of vulnerability and fix them before they become serious disruptions. This includes individual user service (including other users with potentially similar issues) and business-level service, as well as all points in between. DXC integrates this proactive level of service throughout other IT operational areas and can often automate resolution of identified situations. Ongoing analytics help track the user experience score and service reliability, as well as monitor the effectiveness of remediation or improvement.

5. **Data security and compliance**

   As part of our continuous monitoring and analytics, DXC can identify policy circumvention, shadow IT, undesirable or nonauthorized data stores and activities that may make a device or a user vulnerable. Automation, user notifications and feedback mechanisms encourage cooperation and education rather than relying on difficult and costly enforcement.

6. **Response times**

   Unlike reactive support approaches that struggle to correctly identify the impact of an issue, DXC’s proactive support identifies issues before the user calls and takes action quickly. All issues are priority issues and receive better attention because of more automated and effective resolution.
The bottom line

Proactive and preventive user support, continuous health checks 24×7 and smart diagnostic capabilities improve dependability and provide a more efficient route to outcomes and use of IT support resources. DXC proactive support delivers a full range of user support scenarios that make a significant impact on costly IT disruptions and outages.

DXC understands that often the main driver for any business decision is centered on cost savings, efficiency and productivity. Taking a proactive approach to user support with effective user-experience monitoring and actionable analytics will save valuable business dollars in the short and the longer term.

About the author

Alan Broadhead is a subject matter expert for DXC Technology Support Services, with more than 30 years of IT experience. He currently leads the DXC approach to proactive support and analytics, with a strong focus on helping clients move to the next generation of user support. Alan recently returned to the United Kingdom from the Asia Pacific region, where he was at the forefront of workplace and cloud activity, assisting many of Asia’s leading enterprises on their transformation strategies and requirements. Previously, he brought strong technical leadership to many of the largest Hewlett Packard and Hewlett Packard Enterprise accounts in EMEA. His career includes 15 years in UK government IT and a variety of roles with IT startups.

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