Transform user support with proactive and predictive analytics

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

In today’s mobile and digital workplace, employees expect and demand IT support that’s fast, reliable and easy to use. Many companies have already tried to reduce call volumes or queue times, offer call-back options, provide self-service and even more personalized, convenient ways to support employees. But what happens when companies use analytics to predict issues and implement proactive user support?

The importance of proactive support services

No matter how good they are, standard user support processes are largely reactive, providing assistance only after a problem or disruption happens. Because accessing support services takes too long, 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 it’s considerable.

Adding elements such as mobility, outsourcing, software as a service and cloud-delivered services, there is an even greater chance for the technology to break down. This puts pressure on organizations to find more efficient and automated ways to deliver support services.

Companies can no longer run in reactive mode. Today, the most productive and satisfied employees are those who have uninterrupted, responsive, reliable access to the systems and information they need. (See Figure 1.) The old legacy processes, such as ITIL, service desk incident and root cause analysis, are reactive responses. Companies need to identify and diagnose developing issues early. In a proactive mode, companies can find delayed services and failing devices and predict which users will have issues.

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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?
Benefits of a proactive support approach

A well-designed proactive and preventive service model will significantly improve overall IT performance and user satisfaction, and it can reduce inbound calls by 20% to 30%. Using a combination of 24×7 monitoring technologies, companies can analyze events to show the real-time state of devices, user activity, locations, applications and business services. It’s now possible to analyze and act on these live, user-centric metrics immediately. And companies can prioritize actions to minimize employee disruption.

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. Even better, systems can now automatically resolve the issue on the user’s behalf. By generating business intelligence through analytics, companies can use data that helps them pinpoint precisely where to reach out in the organization with recommended changes. This dramatically improves the support team’s performance, which reduces negative user experiences. Table 1 provides a comparison of reactive, proactive and predictive approaches.

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Reactive Proactive Predictive

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<thead>
<tr>
<th>Viewpoint</th>
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<tbody>
<tr>
<td>User experiences an IT issue</td>
<td>IT analytics monitor network, services and devices 24×7</td>
<td>Synchronous real-time intervention is based on continuous monitoring and analysis</td>
</tr>
<tr>
<td>User contacts support organization and describes an issue</td>
<td>Alerts provide data about developing issues</td>
<td>Predictive analysis identifies and then attempts to prevent service-impacting events</td>
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<tr>
<td>Many issues may be escalated for onsite dispatch</td>
<td>Proactive support providers reach out to users — before an issue occurs — with warnings, resolution or directions for remediating the issue</td>
<td>Predictive operations such as dashboards, automated diagnostics and early focus allow quick action</td>
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<tr>
<td>Reactive SLAs lead to low employee productivity</td>
<td>Many issues go unnoticed by users, with little disruptive impact</td>
<td>IT performance and employee productivity levels are high</td>
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<tr>
<td>SLAs are met, but employees are not satisfied</td>
<td>Employees’ experiences are better; they are pleased by high support levels</td>
<td>Employees enjoy an enhanced user experience</td>
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Table 1. Comparison of reactive, proactive and predictive approaches for IT user support

**How predictive analytics and machine learning help your business**

Predictive analytics can help organizations realize significant improvements in system performance, avoid more common outages and keep employees productive. Predictive analytics look at probabilities and trends, measuring variables to predict how something might behave. Advanced analytics capabilities include ad hoc statistical analysis, predictive modeling, data mining, text analytics, optimization, real-time scoring and machine learning. Through predictive analysis, organizations can analyze past outages to determine root causes and proactively develop strategies to prevent reoccurrence and future downtime.

Machine learning lets companies more accurately and efficiently identify where technological assets are underperforming and 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 on public networks to predict when an issue may 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:

1. **Clarify** the organization’s goals and identify the most relevant data.

2. **Prepare** the data and determine the predictive model. Once the data is consolidated from multiple sources, the organization can select the algorithms that best match its goals. Test the algorithms with small subsets of the data until the best model has been determined.

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.

By using predictive analytics to forecast the likelihood of outages, companies can proactively plan for operations that run more smoothly. Downtime can cost millions, and when that happens, valuable resources are diverted from more valuable activities such as improving the overall performance of IT systems and support teams.

**Six benefits of proactive and predictive user support**

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 without the disruption of outages or failures — just makes business sense.

Companies have to expect they will encounter IT issues. However, proactive user support lets businesses foresee problems, reduce costs and implement fixes before the problems lead to significant losses in productivity and results.

Proactive user support delivers benefits in six areas:

**1. Decision making.** Gives businesses the insights needed for effective planning and analysis.

**2. Budgeting/planning.** Helps businesses gain deeper insights through monitoring, continuous health checks and more effective use of scarce IT resources.

**3. IT support-cost savings.** Saves money and makes employees more efficient, increasing morale and confidence.

**4. Uptime.** Identifies areas of vulnerability and fixes them before they become serious disruptions.
5. **Data security and compliance.** Sets security policies and monitors shadow IT as well as undesirable or unauthorized data stores and activities that may make a device or user vulnerable.

6. **Response times.** 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 predictive user support, continuous 24×7 health checks and smart diagnostic capabilities improve dependability and offer a more efficient route to outcomes and use of IT support resources. Taking a proactive approach to user support with effective user-experience monitoring and actionable analytics saves money and makes employees more productive.

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