Pervasive Support

Takes IT Service to the Next Level

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End users are becoming increasingly aware and accepting of new support mediums: Web chat, remote support, and self-service knowledge bases. Faced with the demand to support these new mediums, service desk technicians must reduce the time spent interacting with end users and increase productivity through enhanced first call resolution. Implementing a pervasive service support initiative is one way for IT to meet these growing challenges. A 'pervasive support automation initiative' includes all three support automation areas; live support, self-service automation, and self-healing.

This article discusses the concept of pervasive support and offers some practical advice on how to develop a support automation initiative that delivers enhanced end user satisfaction and higher end user productivity.

Understanding Pervasive Support

End user appreciation of the IT service desk and adoption of new support solutions is key to the success of the support operation and this can be achieved by exceeding expectations.

Exceeding end user expectations is possible if support restores end user productivity on the first call and proactively repairs issues. Pervasive support provides support that is easy and convenient to use anytime of the day or night.

Pervasive support delivers automation to as many levels of the IT service desk environment as possible—from real-time end user chat sessions with technicians, to self-service touch points for automated problem resolution on a corporate Web site, to unobtrusive automated healing of thousands of computers at a time.

Automation During Assisted Service—During end user chat sessions, automated diagnosis and repair capabilities enable technicians to increase the efficiency and effectiveness of resolving problems during the first call to the service desk.

Capabilities such as automated system information retrieval eliminate the need for excessive end user involvement and increase telemetric accuracy. Automated tasks implement resolutions to common problems with no end user intervention required, removing the need for time-consuming manual support (telephone, e-mail, deskside) and reducing end user downtime.

Automation as Part of the Self-service Experience—As part of the self-serve experience, end users can access automated fixes using self-service tools. Automated analysis and repair capabilities empower end users to go beyond a manual diagnosis and resolution, often leading to a significant decrease in service desk calls. Single-click access to knowledge-based articles and automated tasks can provide end users with the information required to solve low to medium complexity issues instantly—without having any advanced technical knowledge or skill.

Automation via Self-healing—Self-healing describes any device or system that has the ability to perceive that it is not operating correctly and, without human intervention, make the necessary adjustments to restore it to normal operation. Because end users may find the cost of service too expensive, self-healing tools can be utilized as a way to reduce overhead.

With healing tools, service support practices are automated and invoked when required. Healing routines can automatically monitor critical systems such as file systems, registries, system downtime, hardware, system properties, and overall performance.

Self-healing monitors automatically verify issues and predict solutions. Once issues have been detected, self-healing routines automatically push automated solutions, preventing future problems before the end user is even aware any exist.

Levels of Pervasive Support

The delivery of cross-channel customer service across a combination of self-healing, self-service, and assisted service touch points is an important step towards building end user buy-in and adoption and ultimately improving workforce productivity. End user acceptance can be measured in three stages:

1. **Satisfaction**—In this stage, end users believe the current support tools and processes implemented meet their existing needs.

2. **Exceeds Expectations**—This stage represents how end users feel after engaging with the support staff, leaving them with the feeling that the experience exceeded all expectation levels.

3. **Adoption**—End users support adoption when expectation levels are exceeded. End users at this level feel the IT service desk provides the best possible experience.

During assisted support, automation can enhance services by automating the diagnosis and repair processes. With support automation, the end user does not have to mediate the issue diagnosis or repair process. With collaboration and automation tools, once the end user is connected to the service desk, they can continue to work while the technician diagnoses and repairs issues behind the scenes.

Achieve End User Satisfaction

End user satisfaction is an achievable goal for any IT service organization. By providing live Web support with 24/7 assistance, end users can resolve many issues. First call resolutions can be improved by transferring knowledge from subject matter experts to level one or two service desk technicians. End user satisfaction can also be achieved through the use of a remote support solution which is built on a strong end user security framework that complies with data privacy regulations. And replacing and consolidating legacy support tools eliminates complexity and improves efficiency for the end user and the technician.

Exceed Expectations—The difficulty encountered with most self-service initiatives is that actual issue resolution depends on the end user's technical abilities and their time availability. In many cases, even if the end user is able to locate an answer to their issue, he/she may lack the technical ability or confidence to execute the fix. Support automation removes the end user's need for technical prowess and enables faster issue resolution.

IT organizations can exceed end users' expectations with the support they receive in a number of ways. By incorporating automated issue response routines into self-service offerings, IT organizations can improve self-help success rates and speed up issue resolutions. Automating the diagnostics routines interface helps speed knowledge base searches. E-mail responses that include automated repair routines can decrease resolution times. An automated repair routine posted on the support portal can help end users expedite the phone support process. IT organizations can also proactively post automated resolution routines for the most common issues to the self-service portal.

Lastly, by ensuring the efficient escalation of support requests from the self-service portal to online assisted support while maintaining a seamless end user experience, IT organizations can exceed expectations.

Build User Adoption—In the same way that self-service initiatives provided a paradigm shift in the delivery of support; support automation solutions, specifically self-healing, offer an important extension to the capabilities of an IT service desk that help build end user adoption.

Self-healing removes the technician and the end user from the support equation by having the computer monitor itself and prevent problematic conditions before they become issues that impact productivity. In the event the computer is operating outside of pre-defined tolerances, automation processes will engage to resolve the situation.

End user adoption can be increased in a number of ways. As the support organization transforms from reactive to preventative by monitoring the state of applications, hardware, registry, and configuration settings via self-healing routines, end users will more readily adopt applications, policies, and procedures. Solutions pushed to remote end users that detect and prevent emerging security threats before end users are even aware they exist encourage faster adoption.

IT organizations also enable adoption through the use of self-healing monitors that drive issue resolution to online, as well as offline, systems. By monitoring changes in real-time and providing end users with the most accurate solutions, while keeping them informed on potential fixes, IT organizations can continue to build end user adoption.

Starting the Evolution

Organizations can begin the evolution to a pervasive service desk today. From impact assessment, to complete project requirement analysis and roll-out plans—any organization can initiate its own support automation strategy to drive greater efficiencies and achieve increased savings.

IT can contribute to this pervasive service approach by clearly formulating the organization's support automation goals and objectives, and identifying capabilities that will help achieve the desired end result by:

- Building a solid business case to achieve buy-in from management.
- Conducting research to formulate metrics that will help monitor the progress and impact of the support automation initiative.
- Utilizing the findings from this analysis to create deployment and roll-out plans for the support automation initiative.
- Leveraging the expertise of a support automation partner to ensure successful delivery of the support automation initiative.

By maintaining this pervasive approach and maximizing the support organization's capabilities, the IT organization can improve overall end user productivity, satisfaction, and adoption of all support automation processes.

CA's Support Automation Business Technologist, ***Anna Orban****, analyzes the economic value of support automation projects for CA customers worldwide, which gives her a unique and practical perspective on how IT service desk support can help organizations achieve their business goals.*