

Introduction

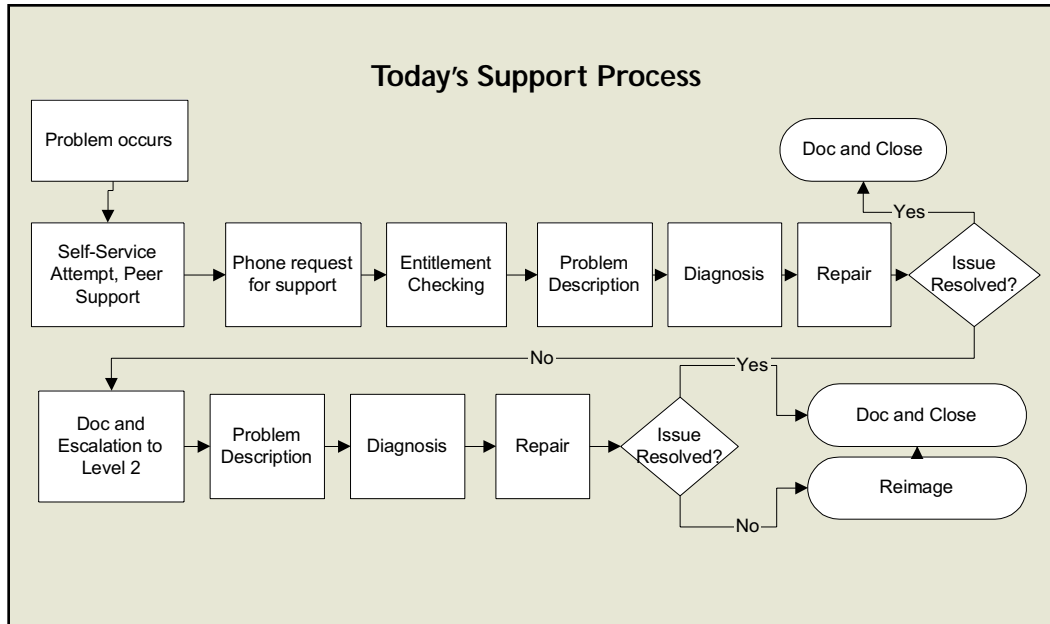
eSupport represents the inevitable shift from traditional telephone-based technical support to the use of the Web to provide automated technical support processes and electronic delivery. The growth of the eSupport market is being driven by a few key trends. In businesses, a growing number of enterprise help desks are required to support not only internal users, but external customers, partners, and suppliers as well. For consumers, the expectation of a low (if not free) cost of technical support has resulted in a corresponding requirement, on the part of ISPs and PC manufacturers, for providing that support at the lowest possible cost.

This document will illustrate how a Support.com eSupport solution can reduce the overall cost of support for a typical organization and yield an attractive return on investment (ROI). To build the ROI model, Support.com consulted many top sources of help desk information, including Gartner Group and Help Desk 2000, and combined this research with information gathered from Support.com customers. While it is clear that no two support organizations are alike, we were able to identify key metrics common to all support organizations.

What does the support process look like today?

When an end user discovers a problem, he typically attempts to solve the problem on his own, or seeks out help from a colleague. If unsuccessful, a call to the help desk is placed. The person who answers the call is usually characterized as a “Level 1” support engineer, who is typically responsible for gathering information about the user and nature of the problem. In most cases, a Level 1 support engineer attempts to solve the customer’s problem, but only if it can be done with a minimal amount of time and effort.

Incidents that cannot be resolved by Level 1, or are too time-consuming, are passed to “Level 2” personnel. These engineers are generally more highly skilled than Level 1, and are expected to see a case through to closure. Incidents escalated to Level 2 typically repeat the Level 1 process, and occasionally result in a costly re-imaging of the end user machine (at an estimated \$240 per re-image).

Demonstrating Return on Investment in an eSupport Solution

While this structure is fairly common to all reported incidents, its effectiveness varies widely across organizations. At each stage, inefficiencies exist that must be identified and addressed if an organization wants to see real cost savings:

Demonstrating Return on Investment in an eSupport Solution

Phase	Description	Inefficiencies
Self-Service Attempt / Peer Support	A non-technical user tries to find the “needle in the haystack.” Because of the system complexity or a lack of expertise, the user’s efforts are usually unsuccessful, and may even make the problem worse.	<ul style="list-style-type: none"> ■ Time-consuming ■ Attempts to solve problems with inadequate resources
Phone Request for Support	A phone call is placed to an analyst, who is then focused exclusively on resolving the problem at hand. Users may be forced to wait for an available analyst, particularly if a call is placed during “peak” hours.	<ul style="list-style-type: none"> ■ One problem per technician ■ Time wasted while user waits ■ Either too few technicians available to meet demand or more than necessary
Entitlement Checking	Technician must manually check whether or not the user is entitled to support.	<ul style="list-style-type: none"> ■ Error-prone ■ Time-consuming
Problem Description	The user and technician engage in discussion about what the problem is. The user may or may not successfully describe the true problem. The technician enters this information into a “trouble ticket.”	<ul style="list-style-type: none"> ■ Time-consuming for engineer ■ Information may be incomplete or inaccurate
Diagnosis	The technician often walks the user through a standard series of tasks, such as checking available disk space or number of applications running. Often, there is no available record of previous repairs, and the conditions that caused the problem may have changed. If the technician sees no clear course of action, the incident may be escalated to Level 2.	<ul style="list-style-type: none"> ■ Manual searching and action execution ■ Information may be incomplete or inaccurate ■ Repetition of previous attempts to solve ■ Time-consuming
Repair	The technician instructs the user to perform actions in an attempt to solve the problem. User may or may not perform as instructed, or may be incapable of performing the task. The process is repeated until the problem is resolved, or escalation to Level 2 is necessary. In some cases, it is necessary for Level 2 technicians to visit the desktop, or even re-image the machine	<ul style="list-style-type: none"> ■ Error-prone ■ Information may be incomplete or inaccurate ■ Travel to desktop often required
Document and Close	The technician manually transfers information about the actions taken into the case.	<ul style="list-style-type: none"> ■ Error-prone ■ Information may be incomplete or inaccurate ■ Time-consuming

Why is this process so inefficient? Two main reasons have been identified:

- **Too much data, too little information:** Systems are made of thousands of moving parts, a situation that is getting worse instead of better. As a result, it is becoming extremely difficult to pinpoint the precise cause of a problem, especially when trying to do so manually.
- **Communication difficulties:** The sharing of information among the various parties involved in resolving a problem is inefficient and tedious. Users and technicians can't be expected to provide each other with consistently accurate, pertinent information, for there's far too much left open to interpretation.

A Vision for eSupport

What is needed is a solution that reduces or eliminates these inefficiencies across the entire support process, a solution that would provide both users and support technicians with the tools, resources, and access to information to minimize the time and costs associated with resolving problems.

Specifically, an ideal eSupport solution will:

Automate today's manual processes

- Automatically gather all of the appropriate data for each problem
- Synthesize raw data into information that can be used to solve the problem.
- Offer "mass personalization" of solutions; in other words, tailor each solution to a particular system's needs for a particular support transaction.

Eliminate communication inefficiencies

- Automatically create a thread of all actions taken and share this information with all parties involved in the support transaction
- Provide a platform that enables seamless interaction between all parties involved
- Automate routing of calls to the appropriate service provider and technician

What will tomorrow's support transaction look like?

In order to understand the potential results of an effective eSupport solution, consider what a support transaction in an eSupport environment might entail.

There's a problem...or is there?

If the support organization has enabled "self-healing," the user may never even know that a problem exists, because the broken system is repaired when the user fires it up. The user experiences no down time, and no call is generated. However, an official case is created to capture this "incident," so that organizations will know about the problems they never see.

The user tries to solve the problem...

If the problem is not "self-healed," the user will become aware of it. At this point, the user may decide to try to fix the problem himself. He will open his local Support.com self-service module, and select the application or system causing trouble. A simple point and click will allow automatic diagnosis and repair of the affected system.

If the user is merely seeking information on how to perform a particular task, he may launch a "support action" that will take him directly to the needed information. Alternatively, he could visit his personalized support portal, giving him immediate access to the appropriate content.

The user seeks assistance...

If the user is not entitled to perform self-service, or is unable to solve the problem, he will seek assistance. Instead of picking up the phone, he'll point and click. The user will automatically be routed over the network to the service provider and technician who can best solve his problem.

Before the technician responds, entitlement has already been confirmed. When the case is opened, it is populated with all pertinent information about the user and his environment. There is little need for questions and answers. The technician performs remote diagnosis of the affected system, and makes the necessary repairs. If the problem requires further investigation, and the user permits, the technician can "step inside" the user's machine and take actions to resolve the issue.

While the user is verifying that the repair has been successful, the support technician receives an incident from another user, with whom a new chat session is initiated. The technician simply opens another window on his screen, and manages several cases at once.

Problem solved...

Once the fix has been verified, the technician can close out the case. Information about the actions taken is automatically pulled into the case, ensuring completeness and accuracy.

Bigger problems...

When a problem is discovered on multiple machines, or the potential for a widespread problem exists, administrators conduct a “mass repair.” All instances of the problem are located and resolved with a single action.

As you can see, the right eSupport solution offers dramatic improvements in efficiency and service levels throughout the support transaction.

Building an ROI model

In order to quantify the value that Support.com’s eSupport solution can create for a support organization, the following ROI model has been created to identify the cost savings resulting from the application of specific solutions to specific problems over a three-year horizon. It identifies five primary “cost drivers,” or factors with the highest potential to reduce support costs. They are:

Cost Driver	Reason
Number of incidents received	The most direct way to reduce overall costs is to reduce the number of incidents reported. Self-service reduces the number of incidents.
Level 1 incident handling time	Time is money. Faster, more efficient calls allow fewer support engineers to process more calls.
Level 2 incident handling time	The time of Level 2 engineers is very expensive. The less time they spend visiting desktops, the more time they can spend on improving your bottom line.
Escalation rate	Allowing Level 1 to resolve more issues means substituting relatively expensive labor for relatively inexpensive labor.
Re-imaging frequency	Re-imaging is the dreaded last resort for resolving problems. Avoiding this time-consuming, costly, unpleasant experience is critical.

In producing our analysis, we made further assumptions about today's "typical" support organization:

- Nearly all incidents reported to the help desk can be categorized in the following way: break/fix software, break/fix hardware, how-to, service requests, password resets, and outages. The majority of incidents are software related (and problems identified as hardware related often turn out to have a software-related element).
- Each type of incident has an associated average length, escalation and re-imaging frequency
- The two levels of support (Level 1 and 2) have different cost structures, with Level 2 incidents typically being more expensive to resolve
- Level 1 personnel are not able to resolve many problems requiring significant changes to an end user's system.

Unleashing the Power of Support.com

How, specifically, does Support.com deliver the eSupport vision?

Call Elimination

Reducing the numbers of incidents is clearly the ideal efficiency gain. The least expensive support incident is the one that doesn't occur. Support.com enables businesses to provide their users with a customized support portal capable of either directing the user to the information they are seeking, or helping them repair a problem themselves. SupportActions targeted at a company's top 50 or 100 call types are flexible and easy to create, and make a significant dent in overall incident volume. Support.com's mass repair capabilities solve widespread problems before they manifest themselves.

Support.com expects to reduce incident volume by 5-15 percent.

Reducing Level 1 and Level 2 Handling Time

Support.com's ability to seamlessly connect end users to support providers via intranets, extranets, or the Internet drastically reduces the time spent simply initiating a support transaction. Once connected, the automated transfer of information between the two parties prevents time-wasting errors and manual data entry. Support.com's unique DNA Probe™ technology enables automated diagnosis and repair of complex problems on a wide variety of systems, meaning the endless search for the "needle in the haystack" is reduced to point and click. If a problem is escalated to Level 2, the technician already has a full, accurate description of the user's environment and previous resolution attempts to work from.

Support.com expects to reduce Level 1 incident handling time by 10-25 percent and Level 2 incident handling time by 30-40 percent.

First Call Resolution

By automating diagnosis and repair, Support.com allows Level 1 technicians to solve the more complex problems that typically require escalation to specialized personnel. In this way, potentially costly incidents become relatively inexpensive to resolve. Level 1 engineers are far more productive and satisfied, and Level 2 engineers are freed from monotonous and time-consuming tasks to perform value-added services. Users experience higher satisfaction from getting quick resolution from a single individual.

Support.com expects to improve first call resolution by 15-25 percent.

Re-imaging Frequency

When Level 2 technicians are unable to resolve a user's software problem, the only option is to re-image the machine, a time-consuming, painful process for all involved. Additionally, a re-image often represents a failure of the support process to identify and repair the root cause of a problem. Support.com's powerful diagnosis and repair capabilities allow Level 2 technicians to find and solve problems they were previously unable to find. Avoiding a costly re-image is a big win for the support organization and the user.

Support.com expects to reduce re-imaging frequency by 20-30 percent.

The "Summary of Cost Savings" section at the end of this document summarizes the potential cost savings for a typical organization.

Conclusion

Simply put, Support.com will help change the way your company provides support. Level 1 personnel will no longer have the "dispatcher" mentality, but instead play a key role in the diagnosis and repair of all kinds of issues. Problems will be proactively dealt with through the creation of SupportActions and through mass repair. End users will be given the ability to perform repairs on their own systems, shortening down time and giving them more control over their work environment. Organizations will continuously identify areas for improvement and build SupportActions and procedures to address them.

Of course, there are many other benefits that this model did not attempt to quantify:

- Increase in efficiency and productivity of end users
- Lower help desk turnover
- Higher satisfaction levels among support engineers
- Improved relationships between support staff and end users

While more difficult to attach a dollar value to, these benefits are very real and should be factored in to the overall analysis.

Support.com Delivers eSupport Solutions

Support.com is used by customer support organizations to support customers, partners, clients, suppliers, and employees over intranets, extranets, and the Internet. A number of leading-edge organizations—including JCPenney, Bear Stearns, Chase H&Q, Compaq, everdream, CompuCom, Excite@Home, and Globo Cabo—are among those that have chosen Support.com eSupport solutions. For more information about Support.com, call us at 1-877-4WEBSPT or visit our Web site.