

E-Support: The Measure of Success. IT organizations looking to increase support efficiencies are evaluating e-support as the solution. Metrics are the key to determining the order of implementation and the effectiveness of the e-support strategy.

META Trend: By 2002, 70% of IT help desks will evolve to customer service centers responsible for consolidated problem, service, and information support. First-call resolution rates will increase to 85% (2003), facilitated by e-support adoption (e.g., automated support tools, knowledge deployment). By 2004, 60% of IT service centers will evolve to a customer advocacy role responsible for relationship management and service reporting portals.

As IT organizations become more effective at supporting employee needs (including problems and service requests), and as application/infrastructure complexities continue to increase, call volumes at top-tier IT customer service centers will grow (from current 1.75 calls per employee per month) to three calls per employee per month by 2003. This call-volume increase will drive a growing IT help desk staff ratio (versus employees) from current averages of 1:400 to 1:250 in 2003 (assuming IT service desks continue to operate in human-intensive paradigms). This trend is leading IT groups to consider alternative e-support strategies (see SMS Deltas 812, 20 Aug 1999, and 870, 3 Mar 2000). E-support (see Figure 1 in Addendum) holds the promise of increased efficiency via existing support environments (traditional phone support) by using techniques to assist Level 1 analysts in their diagnostic, troubleshooting, and resolution efforts and increase effectiveness via integrated employee self-service paradigms (see SMS Delta 917, 20 Jul 2000).

Current implementation approaches have relied mostly on guesswork about which technologies to implement first, with little chance of providing valuable ROI information regarding the success of the e-support implementation. Indeed, we believe this tactical approach to e-support will cause 60% of the e-support implementations to not meet quantifiable expectations through 2001/02. However, better planning and integration into trouble-ticketing systems to provide meaningful metrics, along with increased e-support marketing efforts by IT groups, will ultimately lead to widespread e-support technology adoption. Indeed, we

believe 80% of enterprise IT groups will have strategic e-support initiatives in place by 2004/05. Successful implementations of e-support programs must include upfront measurements to determine the best potential ROI. In addition, back-end integration into help desk/trouble-ticketing systems to measure ongoing effectiveness of e-support is a critical success factor in demonstrating the ROI and the effectiveness of each e-support component.

Upfront Measurement

Where to begin e-support implementations often depends on a client's environment. However, data required to make such decisions should be (or, with minor modifications, will be) readily available in the client's trouble-ticketing system. Figure 2 (see Addendum) shows a minimal list of trending reports that should be captured for at least three months prior to e-support implementations. The most critical of these metrics focuses on incident categories — specifically the number of incidents as well as the amount of time spent on each incident category. This ultimately equates to dollars spent on each

Business Impact

Developing a more automated electronic support strategy is the best way to significantly manage runaway IT support costs.

incident category. These categories should then be mapped into areas that parallel the e-support technology landscape. An equation is then applied (see Figure 3 in Addendum) to help determine a phased approach to implementing an e-support strategy. For conservative estimates, it can be assumed that the adoption rate of e-support will be approximately 50%.

Once an amount of potential savings has been established, a weighting factor is applied based on cost and implementation difficulty for each category (see Figure 4 in Addendum for META Group’s general guidelines as an example). These weighting factors can change significantly from company to company, dependent on process-automation maturity (and many other factors). For example, if one IT organization has already invested in electronic software distribution (ESD) for their large software rollouts, the cost and implementation time would not warrant a significant increase, whereas an IT organization that has not already implemented ESD would incur significant costs and implementation times. In addition, an efficiency factor should be considered (e.g., total employee self service = 100%, while assisted service might be only 50%). Once the metrics are gathered and put into this equation, the order of implementation can be

determined. One exception to this rule is that the first e-support implementation should have a weighting factor no higher than two. This will enable the IT support group to demonstrate a quick success with a tangible ROI (see Figure 5 in Addendum).

Back-End Measurements

The final element to successful e-support implementations is to measure the overall ongoing effectiveness of each component. This can only be achieved by integrating the e-support technologies with trouble-ticketing systems to track “one-touch” resolution and determine the effectiveness level of each e-support component. For instance, if an employee accesses the Web to reset a password, a ticket should be opened as soon as the employee submits the request. Once the request has completed successfully, and an employee has reset his/her own password, the ticket should be closed with a total analyst time of zero minutes and a special status field signifying the access method and e-support technology responsible for the fix. Consequently, reports can then be run to determine overall e-support effectiveness and show a reduction in cost per incident. In turn, these reports should be used as marketing levers to entice employees to use e-support methods.

Bottom Line

IT organizations evaluating e-support as the panacea to their runaway support costs should first capture metrics to determine the best phasing of e-support components. Likewise, using metrics once e-support technologies have been implemented will ensure proper ROI measurements.

Figure 1 — Definition of E-Support

E-support is the process by which customers (employees or external customers) are supported via electronic means (e.g., electronic software distribution, remote control, automated password reset, remote diagnostics) to assist support analysts, enable customer self service, or automatically resolve problems before they are detected.

Source: META Group

Figure 2 — Trending Reports

Report Metric	How Metric is Used for E-Support
Percent of calls generated per problem type	Specifically tie to areas that e-support can assist on (e.g., password reset, distribution of software, service requests, status checks)
Percent of overall support time taken to resolve issues	Specifically tie to areas that e-support can assist on (e.g., password reset, distribution of software, service requests, status checks)
Cost/incident	Measure before and after; effective e-support should drive this cost down
Total request/L1 analysts	Expect the number of requests per L1 analyst to increase as e-support is implemented; this shows efficiencies gained
L2 analysts/supported employee	E-support should drive down the number of L2 analysts required per employee
First-call resolution	First-call resolution rate should increase as long as e-support technologies are integrated into trouble-ticketing systems
Mean time to resolution	MTTR should decrease with effective e-support
Customer satisfaction	Customer satisfaction should increase with effective e-support
Call abandonment rate	Call abandonment could increase as end users become impatient with waiting and turn to alternative e-support channels for their support

Source: META Group

Figure 3 — E-Support Equation

$$\frac{\text{Cost of category over period} \div 2 \text{ (assuming 50\% adoption rate)}}{\text{Difficulty factor}} \times \text{Efficiency factor} = \text{Implementation factor}$$

Source: META Group

Figure 4 — E-Support Strategy Guidelines

E-Support Technology	Difficulty/Cost Rating
Remote control	2
Password reset	2
Electronic software distribution (ESD) push	4
ESD pull	3
Self healing	4
Knowledgebase	2
Electronic service request/check status	1
Backup and recovery	2
E-procurement	3

- 1 — No brainer (little or no cost, easy implementation)
- 2 — Relatively easy with reasonable costs
- 3 — Relatively difficult to implement and relatively high costs
- 4 — Difficult to implement and high costs

Source: META Group

Figure 5 — E-Support Rollout Example

Assume the following call volumes have been trended during the past several months. Assume loaded L1 costs of \$40,000/year and L2 costs of \$50,000/year. The only interest is in tracking labor efficiencies; therefore, only loaded labor costs are considered.

3,000 calls for password reset	Avg. cost of \$5/incident	\$15,000/mo. cost
2,000 calls for status check	Avg. cost of \$2/request	\$ 4,000/mo. cost
2,000 calls where remote control helps	Avg. cost of \$6.25/req.	\$12,500/mo. cost
500 calls for software upgrades, etc.	Avg. cost of \$30/req.	\$25,000/mo. cost
1,000 calls where self-healing app	Avg. cost of \$12.50/req.	\$12,500/mo. cost

Order

1. Password reset	$15,000/2/2 \times 100\% = 3,750$
2. ESD	$25,000/2/4 \times 75\% = 2,344$
3. Check status electronically	$4,000/2/1 \times 100\% = 2,000$
4. Remote control	$12,500/2/2 \times 50\% = 1,563$
Self healing	$6,250/2/4 \times 100\% = 1,563$

Source: META Group