Rethinking Call Accounting

Robert Lee Harris

Why do most enterprise customers still have and use traditional call accounting systems?

About six years ago, I knew a telecom analyst at a large investment company who printed monthly reports on extension activity for about 100 departments. One month, the system crashed and she called the department heads to let them know the reports would be delayed until the database could be restored from backup. In all but a few cases, the replies she got from each contact were along the line of, "Don't worry about it." Or "What reports?" She'd been going through the motions for years, not realizing this monthly process was generating unwanted information.

With long distance calling so inexpensive, has call accounting become obsolete? A communications manager with a large IT equipment company recently told me, "It's funny that everyone keeps asking that question: I just did a presentation to senior management because they want to know why we are still supporting call accounting."

He successfully re-justified the system, but not based on usage reporting. "Call accounting has features that greatly support running the business," he said. "I use it to provide corporate security with detailed information about calls to and from the company, about people doing things that they shouldn't be doing.

"Call accounting also gives me traffic analysis in real time: If someone complains about a busy signal, I can see if what's happening is an anomaly or if I really have a problem," the communications manager continued. "And I use it to look for internal and external use and misuse of resources, for performance metrics."

In other words, call accounting still has plenty of value—in many instances for the same reasons companies implemented it in the first place.

Cutting Costs With Call Accounting

It's ironic that, with so many cost-cutting initiatives in large enterprises, telecom managers would have to justify a tool that tracks the third-largest expense in most organizations: voice long distance calling. But IT executives have been skeptical for decades about the cost-cutting benefits of telemanagement.

Ask any telemanagement vendor: They present the product, demonstrate dramatic savings and make the sale. But more often than not, there are unanticipated challenges that prevent the customer from following through and achieving an effective implementation.

A case in point is a financial company in California, where the IT expense manager told me, "We don't get what we would like out of the call accounting system, primarily because of how we designed it five years ago."

The company decided to extrapolate costs based on calls and durations. This avoided some complexity, as well as the time-consuming, ongoing requirement to maintain accurate rate tables. But it backfired when additional cost-cutting pressures cropped up and departments wanted to see their actual costs.

"At budget time," he said, "we are expected to be accurate, to meet the budget—and also to keep coming up with 10 to 15 percent savings. The business units feel the same pressure and want to see actual dollar amounts on our reports."

It's always better to work with real costs. If you work with extrapolated costs, department heads and end users see only a small percentage of a very large expense. Consequently, they feel they have no control over the expense—and they see no value in taking actions to attain savings (see *BCR*, January 2004, pp. 47–49).

Human Resource And Security Issues

Another important purpose for call accounting is to answer requests for evidence in investigations of telephone harassment and security issues, as

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well as abuse of calling privileges. Every communications manager I spoke with recently confirmed the regularity of such requests.

Most harassing callers are at least smart enough to block caller ID, but call accounting activity reports will corroborate the times and durations of calls. Call accounting patterns also help to intercept IT security breaches, such as unauthorized "telecommuting" (employees dialing into their corporate desktops from their virus-ridden home computers), and attempted hacks of PBX, server and mainframe systems.

Call accounting is still used to monitor telephone abuse. You might ask, with calls so cheap, why rely on call accounting as a disciplinary tool? It is true that the days are gone when employees were "written up" for calls to their child care provider. Most employers and employees are comfortable today with a little overlap between professional and personal lives. Many employment policies even explicitly allow for "reasonable and necessary non-work related calls."

Today's telephone abuse is much more blatant. In one recent incident, an employee was terminated for running a side business from inside the company—and averaging over three hours of personal calling every day. Call detail reporting makes substantiating such a case a slam-dunk.

In all these cases, it is the accuracy and real-time nature of the call accounting and other telemanagement data that make it valuable.

Directory Dilemmas

Keeping that data current and keeping telemanagement systems in sync with other corporate directories can be problematic. Telemanagement systems that are only consulted on an *ad hoc* basis can quickly slip out of date unless there is a deliberate updating process. In contrast, if the system is being used for chargeback, for help desk and/or for move and change activity, it's more likely to be linked to human resources, payroll or other regularly freshened databases.

Most telemanagement products can import data to update their call accounting directory information. For example, Telemanagement Technologies' Wincall and Winbill will import from a Windows-based LDAP directory. Veramark Technologies provides the EZShare Import tool as part of their VeraSmart Telemanagment Suite. EZShare lets the user map import data into the database, and make incremental imports.

Even once there is a successful strategy to map directory data into the telemanagement system, it is often a tough decision which data source to use. "We would like to build an interface to our Lawson HR system," one telecom manager told me. "The challenge is that the way we bill telecom does not match the HR hierarchy. The HR hierarchy is built by chain of command, but the departments used for charging assets have a completely different structure."

This is typical of a large enterprise with disparate databases, some containing assets only, some for managing employees but not contractors, and so forth. There may be plenty of data, and it may be updated in real time, but the data isn't being collected or posted with an eye to providing accurate telemanagement directory records. In such a case, there is no technical problem or limitation of the telemanagement software. The telemanagment system will do exactly what is needed, but the company will have to create or change their business processes to make it work.

The cost and asset charging hierarchy does not always match the personnel management hierarchy

Telemanagement Suites And Other "New" Developments

For more than a decade, some telemanagement companies have offered systems that manage not only call accounting, chargeback and directory information, but also cable records, trouble reporting, inventory and service orders. In the last few years there has been another push by many telemanagement application providers to offer these more complete solutions. Some even include cellular phone management.

But unless they need to track cell phones or IP quality of service (QOS), most communications managers don't see much need for new standalone call accounting systems. When the old call accounting system works just fine, especially if its primary purpose is *ad hoc* security and personnel requests, it's hard to find new features that are impressive enough to provoke an upgrade.

Moreover, some telemanagement features are now offered as part of other applications. For example, some IP-telephony systems track their own calls, and new hybrid systems are also coming to market. One example is HigherGround's Telecom Business Intelligence Suite. This quality monitoring and ACD (automatic call distribution) reporting system uses SMDR data collected from the PBX to match account numbers, companies and contacts. The call detail reporting feature is essential to the application. Unlike many other monitoring applications, which rely on computer/telephony integration (CTI)-based integration, in the HigherGround system, the SMDR data is also matched to ACD agent call recordings.

HigherGround's product is probably priced out of reach for a small call center, but a large call center that places a high value on call monitoring would find this to be a very robust call detail collection utility.

Last summer, Concord Communications senior product manager, Ganesh Dholakia explained the capability of feeding the company's eHealth data utilization reporting into a cost management system (see *BCR*, July 2004, pp. 28–30). Early this year Concord purchased Vitel, a 14-year-old telemanagement vendor. As voice and data disciplines converge in large enterprises, Concord foresaw a great value in providing converged performance monitoring.

Large companies don't need the telemanagement suites, while small companies that do need them can't afford to buy them

However, since Concord packaged Vitel under its eHealth for Voice performance management solution, it is barely recognizable as call accounting. Vitel had been a fully mature call accounting application. Now it is a single line in the marketing material: "Automated collection, reporting, and analysis of system statistics for IP and legacy PBX systems."

It will be interesting to see how Concord's "Total Monitoring"-based telemanagement suite competes against the more traditional "Total Expense" based packages. It will also be interesting to see what happens now that Computer Associates has announced it is acquiring Concord.

A third variation in the suites is Micro-Tel's "Total Productivity" approach: This call accounting veteran recently added Internet Access Manager Software, a tool for monitoring Web and Internet activity to its product offerings.

The main problem facing most telemanagement suite vendors is that their "total solution" systems are priced to sell to large enterprise clients. Many small IT/telecom departments might be delighted to get all the functionality bundled into such solutions—but they can't afford it.

In contrast, most larger enterprises have many of these functions covered: Their asset management, help desk and invoice processing are already automated, with separate solutions purchased by completely different departments within the organization.

Meanwhile, customers in the middle seem to muddle along. Some are satisfied with their level of accuracy, tracking and integration while others

Is It Time To Change Your Telemanagement Strategy?

With all the additional and different directions that telemanagement applications are taking these days, how can you tell when it might be worthwhile to upgrade an older system or to acquire new telemanagement tools?

1. Start with an exploration of the different product offerings. Although it is generally a better practice to start with your business requirements, in this case there is some rationale in looking at the solutions being offered first. Most companies have common telemanagement issues, and telemanagement vendors have built their solutions around different methods of trying to solve this common set of problems. By looking into the various new packages, it is quite possible to discover some new cost-saving opportunities that would not come to mind otherwise.

2. After immersing your right brain in the exciting world of Telemanagement applications, develop your business requirements. This will help you to short-list products that may be best in class, but are overqualified for the business requirements. For example, Web management and reporting is overkill if you have only two or three people accessing the reports. On the other hand, if you are pushing regular reports to cost center managers, then Web reporting makes a lot of sense. And you don't need to spend extra for the best call costing system if you only use the system for security and personnel issues.

3. Don't buy a "total" solution without involving all the responsible departments within the enterprise. This could include Finance, HR, Facilities and a number of IT departments, depending on your corporate structure. Identify existing or planned applications that overlap with the processes the new telemanagement system will provide. Resolve these issues before you buy.

4. Figure out in advance where your directory data will come from. If you are doing extensive allocation or chargeback, will the data be provided by a help desk system, email directory, or HR management system? Maybe it will be a manual entry process.

One good strategy for updating telemanagement systems is to use exports provided by move/add/change tools from PBX vendors, but this method won't help in reconciling telco bill data. Human resource management systems generally can't give you information for common area telephone stations (conference rooms, etc.). In other words, you may need more than one source of directory data.

This is especially important because you'll want to look closely at the telemanagement application's import process. A vendor may tell you, "We integrate with Avaya Site Administrator," but more often than not, the "integration" is nothing more than the availability of a .csv file. This may be no more advantageous than a competing product, and if you were expecting dynamic real time record updates, you would be disappointed.

On a final note, there can be good reasons to upgrade a basic call accounting application even if the old system is running along fine. If you figured out how to trick your 15-year-old DOS telemanagement system into handling the Y2K date calculations, you may think there is no benefit in shopping for a new system.

In reality, even if your business requirements have not changed, basic call accounting is better at monitoring and maintaining PBX connectivity, processing large amounts of SMDR records, and running queries over large data sets. Be frugal, but don't be cheap□

are not (see “Is It Time To Change Your Telemanagement Strategy?”).

Conclusion

Getting enterprise customers to change the way they handle administrative functions is never easy. I once had a client who attempted to collaborate with the Facilities department in order to use the cable management module of the company’s facility management system. After hearing a few times from Facilities that “We own the system,” and “Any and all changes have to go through us,” the wedding was canceled!

Even when inter-departmental cooperation can be achieved, the challenge is similar to picking the directory source: The system meets the one core application it was purchased to provide, but it does not meet the needs of other groups.

One customer explained it like this: “We see a single platform as having enough added value that we would definitely choose it, even if separate products were better at meeting the individual requirements.

“The trouble is, even though our financial controller liked the idea of leveraging a single product for other applications, such as the work order module, we cannot use it to replace our existing help desk because it is tied into change management,” he continued.

He added that, “Our CIO wants to do comprehensive ‘same kind’ asset management across different divisions. But for telecom, we can’t use a typical asset management tool because of the recurring costs.”

Another customer explained why his company prefers “best of breed” solutions to using a telemanagement suite: “For work orders, we use the heavy-duty Clarify (now Amdocs) and Remedy (now Peregrine) tools,” he said. “Sure, we would like to have fewer providers—but not at the price of less functionality.”

At least in that customer’s perception, a telemanagement vendor that adds function is drifting from their core competency, and any peripheral application would not be sufficiently “heavy duty.”

In short, most organizations are still content to depend on the call accounting systems they have used for years to provide the basic functions of chargeback, security and directory□

Some customers prefer a single platform; others want to buy best-of-breed for each function that they need

Companies Mentioned In This Article

Amdocs (www.amdocs.com)

Computer Associates (www.ca.com)

Concord Communications (www.concord.com)

HigherGround (www.highergroundinc.com)

Micro-Tel (www.micro-tel.com)

Peregrine Systems (www.peregrine.com)

Telemanagement Technologies (www.telemantec.com)

Veramark Technologies (www.veramark.com)