



Aberdeen *Group*

The Challenge in Total Telecom Cost Management

*To Unlock Savings and Control Spend, Mid-Market Enterprises Can
Learn a Few Lessons from Leading Companies*

June 2006

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Executive Summary

Telecommunications and related network services are a large and growing expense for mid-market enterprises. Telecom costs are difficult to track because they include tangible assets (lines and circuits) with decentralized inventory spread over multiple locations and intangible services. Move Add Change, Disconnect (MACD) service order activity creates a moving target that enterprises must reconcile with their billing. Billing is complex with elements that can be time-sensitive (peak vs. off peak), and volume sensitive. In addition, telecom providers have different billing platforms for their varied offerings. Each platform requires a degree of customization to read and interpret the billing data. Finally, the shift from traditional voice networks to data-centric networks and rapid growth of wireless services requires proactive management to keep inventory and costs under control.

Aberdeen research specifically found that mid-size companies must address the following issues:

- Inefficient manual processes for telecom cost management (64% of bills were reported as being received in paper format).
- Mid-market enterprises struggle with getting bills processed in a timely fashion resulting in *late payment penalties that are 2% of overall telecom spend.*
- Complex carrier services, contracts, and legacy billing systems produce invoices with historical error rates of 7% to 12% for telecom services (80% of the mid-market survey respondents have no formal program to audit for contract compliance).
- Twenty-nine percent of Aberdeen's mid-market survey respondents indicate they do not have a program to track telecom supplier performance.
- More than half of Aberdeen's survey respondents (57%) do not compare their telecom contracts with benchmarks for the best pricing.

As a result of inefficient processes to manage telecom expenses, late payment penalties, carrier billing errors, incomplete comparative benchmarking of sourcing, and inadequate visibility into spend, mid-market enterprises are forfeiting opportunities to reduce telecom expenses by an average of 3% to 10% of their spend.

Why Total Telecom Cost Management Matters

Enterprises need to think more strategically about their telecom and network investments. CFOs have a fiduciary responsibility to manage expenses. Savings from improved spend management can be directed to bottom-line corporate profitability.

CIOs also need to be concerned because 38% of respondents indicate that the IT department has primary responsibility for managing telecom costs. CIOs that are seeking to fund projects to drive innovation and competitive advantage will find that telecom budg-



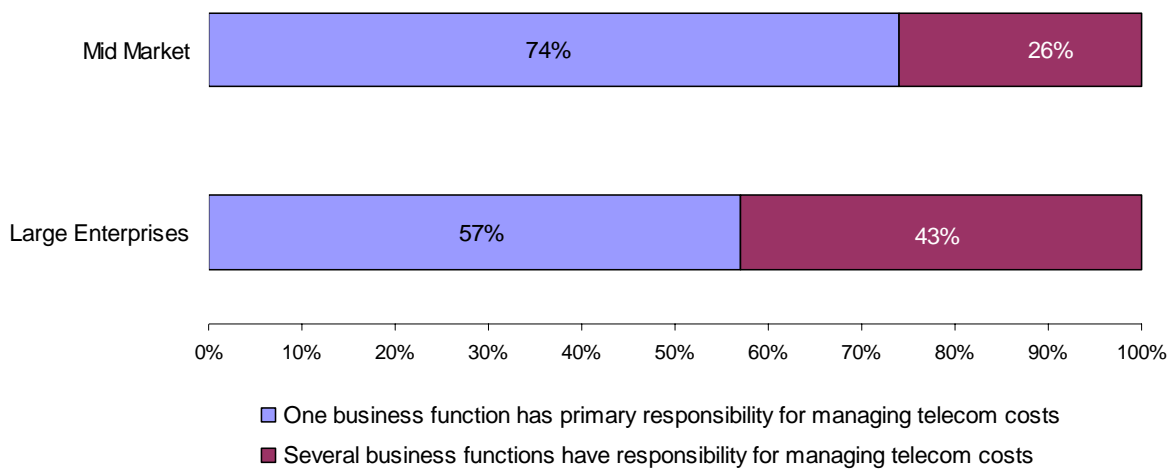
ets provide a rich target for savings that can be redirected from the operational budget to fund new groundbreaking initiatives.

Key Findings

Aberdeen’s latest benchmark found that Best in Class leaders distinguish themselves from their peers with:

- **Greater longevity for formal telecom cost management programs**—In general, Best in Class have had formal programs in place for more than a year and they proactively manage all or close to all of their telecom expenses.
- **Mid-market enterprises have better centralization of TTCM.** More mid-size enterprises have TTCM managed by one department than larger enterprises (Figure i). But centralization of TTCM does not ensure telecom costs will be well managed. Mid-market enterprises must also have the technology and resources to administer the program.

Figure i: Primary Responsibility for Overseeing Telecom Cost Management



Source: AberdeenGroup, June 2006

- **Nearly 30% faster invoice processing and auditing cycles.** This is due to the use of electronic billing media and adoption of specialized TTCM software to process invoices, audit billing, allocate charge-backs, and approve payments.
- **More than 40% greater efficiency when sourcing a telecom contract.** This is primarily the result of standardized sourcing procedures, dedicated telecom category experts, and use of sourcing automation tools and analytics.
- **Broader use of technology** to support asset management, MACD service order requests with carriers, usage analysis and reporting.

Recommendations

Mid-size enterprises should adopt formal total telecom cost management (TTCM) programs for end-to-end management of sourcing, procurement, invoice reconciliation and payment, asset management, and analysis. Programs should focus on improving visibility into telecom inventories, asset utilization, devices, and service spending.



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Chapter One: Issue at Hand

Key Takeaways

- With telecom use poised for growth, mid-market enterprises must take action to save money through formal Total Telecom Cost Management (TTCM) programs.
- Due to lack of visibility, entire categories of telecom spend – such as wireless expenditures – are nearly invisible to mid-market enterprises.
- Mid-market enterprises can leverage several areas to drive telecom savings: sourcing, and automation procurement for Move Add Change Disconnect (MACD) activity, asset management, invoice processing, auditing, and reporting.

Telecommunications expenses produce the most difficult bills for mid-market enterprises to manage. Decentralized offices and locations provides little to no control on who places orders with carriers and how they are placed. A wide range of fixed and mobile assets makes inventory tracking difficult, and the inventory of assets and services is constantly changing.

Billing often has components that are time-sensitive (such as peak vs. off peak) with volume-sensitive pricing. In addition, telecom providers have varied billing formats (e.g., paper, EDI, CD ROM, E-mail, HTML, Magnetic Tapes, FTP, Web download). The terminology and classification varies from one provider to the next, and a single telecom carrier may have more than a dozen billing platforms for its services. Finally, telecom services are going through a sea of change with widespread growth of wireless services and a shift from traditional voice networks to data-centric networks, with Voice over Internet Protocol (VoIP) and multiprotocol label switching (MPLS) technology.

In terms of ratings for telecom carriers' business services, few would suggest that 99.999% network uptime is poor service. The problems center on poor customer care, including post-sales support, billing, and account management. This is a carryover from the culture that existed when AT&T dominated the market into the mid-1980s and the more recent past in which local providers have had limited competition. Mergers and consolidation of carriers have led to cost-cutting layoffs that have hurt customer service departments.

The Strategic Value of TTCM

Enterprises need to think more strategically about their telecom and network investments. CFOs and other finance managers have a fiduciary responsibility to see that expenses are managed and savings go to corporate profitability. CIOs also have a vested interest in managing the telecom budget because savings can fund projects to drive innovation and competitive advantage.

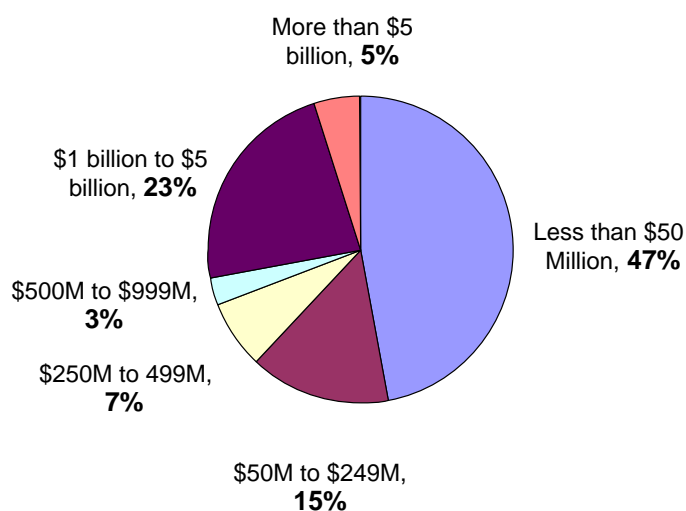
This report focuses on enterprises that spend less than \$16 million per year on telecom expenses. Our research has shown there is not a direct correlation between enterprises revenue and telecom spend. A number of industries with large revenue do not consume



large volumes telecom services. In addition, a number of small companies may have large needs for data networks and communications.

Figure 1 shows that 29% of the enterprises represented in Aberdeen's survey for this report have annual revenue of more than \$1 billion, with 5% at more than \$5 billion. While these enterprises would normally be classified as large, they are included in the mid-market segment for the purposes of this report because their telecom expenses are less than \$16 million. Enterprises that spend less than \$16 million on telecom share many of the same challenges in sourcing, procurement of automation for MACD service orders, asset management, processing invoices, auditing, and reporting. Less telecom spend gives them less leverage in negotiating rates with carriers. Larger enterprises have account teams that are fighting for more of their business. Larger enterprises use this as leverage to get better deals. To unlock savings and control spend, mid-market enterprises can learn a few lessons from Best in Class leaders.

Figure 1: Survey Respondent Enterprises' Annual Revenues



Source: [AberdeenGroup](#), June 2006

Some industries consume more network services and spend more money on telecom. These typically include financial services, technology, oil mining and exploration, pharmaceutical, publishing, and media. Conversely, there are also a number of enterprises with large corporate revenue in the apparel, chemical, hospitality, paper, restaurant, retail, and manufacturing industries that reported telecom spend in the lower ranges of our survey responses. In summary, the survey responses show that there is not always a direct correlation between revenue and telecom spend.

What Is TTCM?

Aberdeen's Total Telecom Cost Management (TTCM) framework is meant to provide a framework to communicate the savings opportunity for managing all telecommunications costs (wireline/wireless) associated with expenses and optimizing expenses. TTCM brings value to enterprises by eliminating unnecessary telecom costs and streamlining related costs in the management process. Aberdeen views this as a five-step, holistic approach:

Sourcing encompasses vendor selection, competitive pricing reviews with market benchmarks, and negotiation. This may include RFPs and e-Sourcing reverse auctions to establish a competitive environment. It calls for a centralized repository for contracts.

Procurement involves placing MACD service orders with providers. Enterprises should have automated systems to manage requests with structured workflow to enforce corporate policy (e.g. approved providers, who is entitled to corporate cell phones, monthly expenses, etc.). These systems should track order requests, approvals, and carrier installation milestones.

Invoice Reconciliation & Payment encompasses invoice processing, validation (reconciliation of contracts with billing, CSRS, and inventory records), filing of claims, dispute management and recovery, internal charge-backs with feeds to internal systems, and payment of bills.

Asset Management is the process of enterprises continually updating their physical inventories, billing records, and provisioning/ordering activities. Invoice reconciliation is the process of comparing these inventories. Asset management is the ongoing maintenance of the inventories and continual verification that they are synchronized.

Reporting Analysis is repeatable, detailed, and accurate telecom expense reporting (including charge-backs, budget tracking, and trend analysis.) It provides faster and better decision making through reports and summary dashboards. It also should help with optimizing network pricing and performance through access to contracts, and other data.

Enterprises can use the TTCM framework to understand how to analyze telecom cost management. While the ideal order of steps to manage the lifecycle of a telecom expense would start with sourcing and finish with analysis, Aberdeen research shows few enterprises are in a position to approach telecommunications this way. In practice, most firms approach TTCM based on where they believe the greatest problems need to be addressed.

Table 1: What is TTCM?

Total telecom cost management (TTCM) brings value to an enterprise by eliminating unnecessary costs in telecommunications processes and reducing total costs through systematic and strategic sourcing. Aberdeen views a five-step, holistic approach to TTCM:

Sourcing – encompasses vendor selection, competitive pricing, benchmarking rates, and negotiation.

Procurement – a process and system to enter orders with a structured workflow for tracking order requests, and approvals.

Invoice Reconciliation & Payment – encompasses invoice processing, validation (audit compliance of contracts with billing, CSRS and inventory records), filing claims, dispute management, internal charge backs with feeds to internal systems, and payment of bills.

Asset Management – continual updating of physical inventory, billing records and order activity.

Reporting Analysis – repeatable, detailed and accurate telecom expense reporting (including charge backs, budget tracking, vendor tracking) and spend analysis to optimize the investment in telecom and network services.

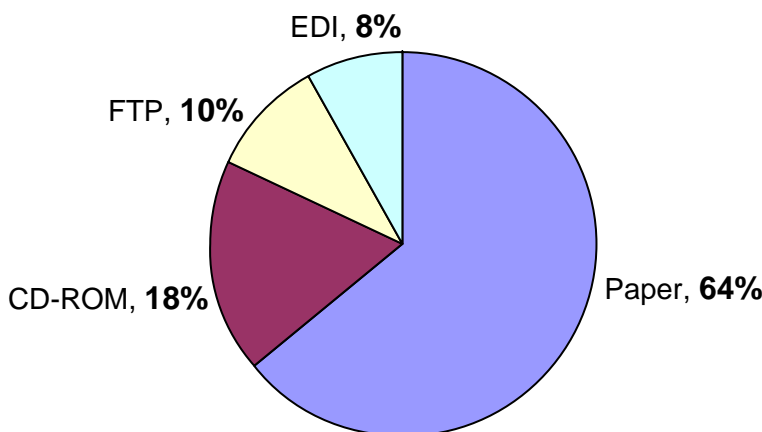


Billing Complexity

The average mid-market U.S. enterprise receives more than 300 telecom-related bills per month. Enterprises, particularly those with many satellite offices, are inundated with separate bills for every location. Moreover, with wireless services, many enterprises receive individual employee bills that have not been consolidated to a master bill, or they simply reimburse employees through expense reports and fail to track the expense. Telecom bills are growing increasingly more complex with indecipherable line items that can average more than 100 pages.

The challenges are exacerbated by the fact that 64% of the bills mid-market enterprises receive are in paper format (Figure 2). When bills are received in paper format, it's nearly impossible to perform automated audits. Inefficient manual processing can lead to lost bills, uncontrolled service disconnects, and late payment penalties. The mid-market enterprises represented in this report average 2% late payment penalties. Meanwhile, Best in Class enterprises were able to reduce late payment penalties to 1.1%, and a number of them report that they negotiate exemptions from these penalties or extended payment terms into their contracts. (It should also be noted that these same enterprises report that a late payment contract exemption does not guarantee carriers will not erroneously add penalty charges to the bill.)

Figure 2: Format Used to Process Telecom Bills



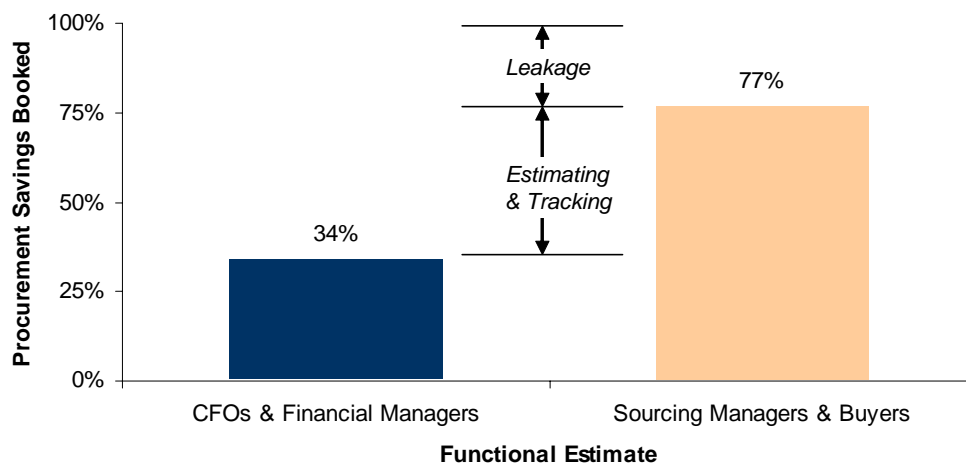
Source: [AberdeenGroup](#), June 2006

The 18% of enterprises that report receiving bills in CD-ROM format are also processing paper. Most telecom carriers do not recognize the CD-ROMs they're providing to their customers as legal documents for billing purposes and billing claims. While there are many useful billing details that can be accessed on CD-ROMs, any discrepancies between CD-ROM billing and paper default back to what appears on the paper bill. Carriers billing systems have calculation errors and drop items off their CD-ROM. Combining the CD-ROM category with paper provides a more accurate picture, revealing that 82% of all billing is processed in paper format.

Linking Contracts to Invoices Is Critical

The majority (57%) of enterprises have little to no visibility into their contracts for bill validation. Aberdeen’s recent *The Contract Management Benchmark Report: Procurement Contracts*, found more than half of companies continue to store at least a portion of their contracts in paper format or in disparate systems/databases, limiting their ability to locate contracts or validate billing. Aberdeen’s September 2005 report on *The CFO’s View on Procurement* showed that CFOs believe that only 34% of projected procurement savings, on average, are realized. Whereas sourcing and procurement managers believe that 77% of the savings are realized. Procurement officers believe that nearly a quarter of the savings, or 23%, are never realized (See Figure 3). Invoices must be audited to close the gap between what gets negotiated in the contract and what CFOs and CPOs believe is implemented. An automated program that links contracts to billing can address this leakage in sourcing price reductions.

Figure 3: Estimated Percent of Projected Procurement Savings Booked



Source: AberdeenGroup, *The CFO’s View on Procurement*, September 2005

Centralization of TTCM Is Not Enough

Mid-market enterprises have more centralization of these tasks within one department or function (Figure i) than large enterprises. But centralization of TTCM does not ensure telecom costs will be well-managed. A number of survey respondents indicated they need more resources and are seeking to use automation to improve how they manage telecom costs.

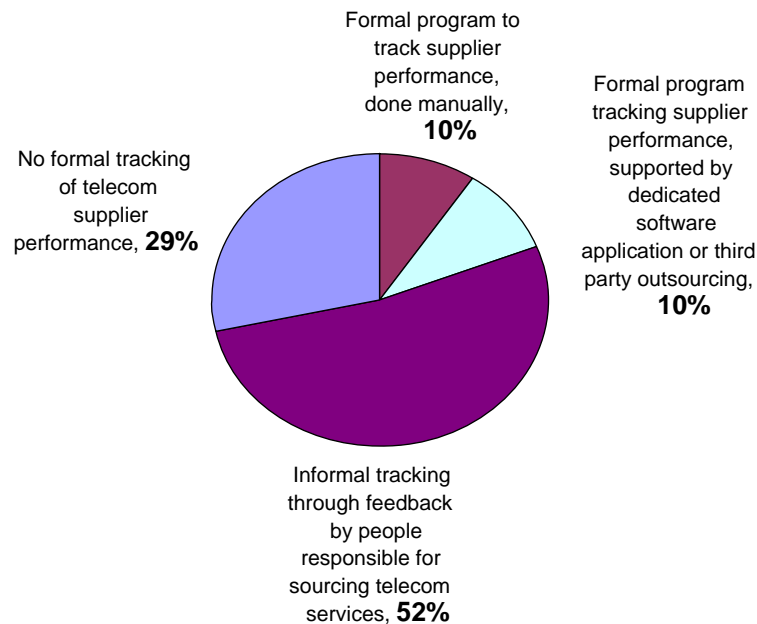
Enterprises that have instituted formal programs are more efficient than those without such programs, such as:

- Processing invoices, avoiding uncontrolled service disconnects and late payment penalties;
- Reporting on telecom expenses and trending analysis. (Actual performance metric comparisons appear later in this report); and



- The time to source a typical contract or process a move, add, change, disconnect (MACD) request for services.

Figure 4: Mid-Market Tracking of Telecom Service Providers



Source: [AberdeenGroup](#), June 2006

To unlock savings and control spend, mid-market enterprises should establish formal programs to track supplier performance. Only 10% of mid-market enterprises represented in our survey report that they have established such programs. Meanwhile, 83% of top performers have had programs in place for at least six months, including 61% that have had them in place for more than one year. (Figure 4)

These top performers are focusing on:

- Driving visibility into spending;
- Improving sourcing, invoice processing efficiencies, auditing, reporting efficiency and performance, and
- Improving utilization of telecom assets.

The top performers draw a sharp contrast from mid-market enterprises that must address:

- Gathering information on spend and organizing contracts to improve sourcing;
- Benchmarking of pricing and terms and conditions to reduce the cost base;
- Establishing centralized control over procurement to ensure orders reference contracts and are placed with preferred vendors;

- Linking order activity to inventory to ensure all service components that are impacted by MACD activity are managed properly. (e.g., if a long-haul circuit is disconnected, the tail-ends of the circuit should be disconnected);
- Establishing clear policy guidelines for ordering of services, devices, carrier selection, and policy for use of these services.
- Conversion of paper billing to electronic media to reduce bill processing costs.
- Streamlining the time to process bills to avoid late payment penalties that average 2% of overall telecom spend.
- Automating auditing to ensure contracted rates and inventories are reconciled with billing to identify errors.
- Gaining visibility into spend and trending of costs by vendor and department.
- Optimizing the investment in telecom services, evaluating capacity requirements, and opportunities to reduce costs through grooming services to less costly high-capacity services.
- Ensuring that over-trunked voice services are disconnected as the enterprise shifts from traditional voice services to data-centric networks.

Neglected TTCM for the Mid-Market

This study shows that most mid-market enterprises are not utilizing formal programs to assess performance of telecom service providers. Under-performing enterprises lack accurate and detailed insight into all their telecom spend. At most companies, telecom expenditures are uncontrolled and under-leveraged.

Aberdeen research has found that entire categories of telecom spend – such as wireless expenditures – are nearly invisible to enterprises due to lack of formal policies and controls for procuring, tracking, and managing utilization of devices and plans. Many of the enterprises in our benchmark indicated they don't have accurate measures of their telecom spend.

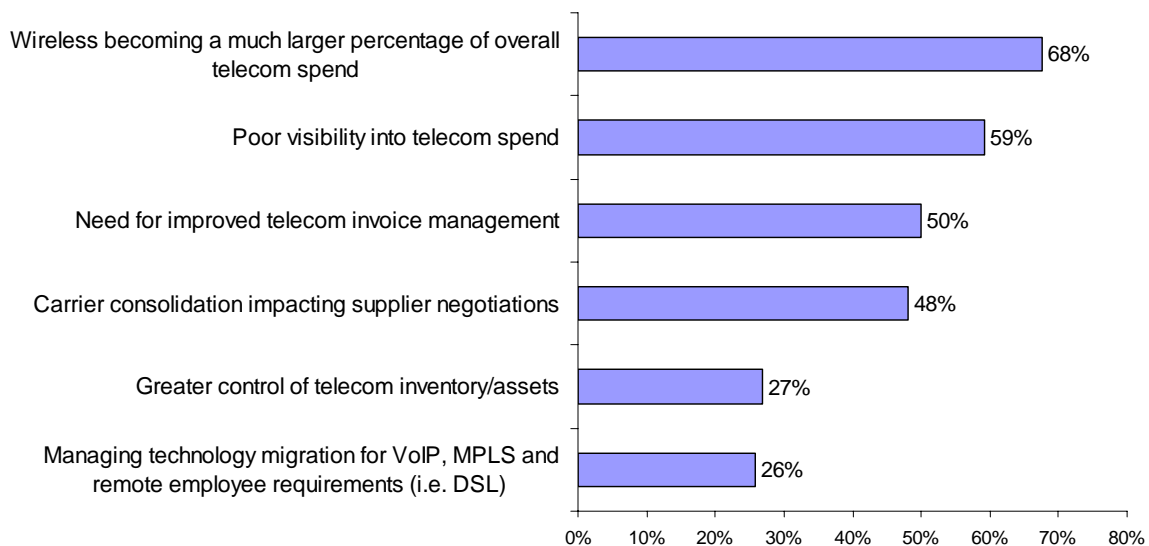
Failure to have a complete accounting for telecom expenses limits procurement's leverage when negotiating contracts. In the declining pricing environment that has characterized telecom services for the past two decades, getting lower rates with each new contract has not been difficult. Aberdeen's survey shows the mid-market achieved rate reductions that ranged from 4% to 50%. This wide range of rate reductions suggests the need to benchmark rates to determine if the gains are really exceptional or money was left on the table.

The mid-market offers a fertile ground for opportunities to rein in costs and establish better control of telecom with a strong return on investment for areas not currently being managed.

Analysis of mid-market responses to surveys identified six pressures these enterprises face in managing telecommunications costs (Figure 5).



Figure 5: Top Pressures Faced by Mid-Market Enterprises



Source: [AberdeenGroup](#), June 2006

These top pressures are the factors causing enterprises to prioritize total telecom cost management as a major initiative.

Chapter Two: Key Business Value Findings

Key Takeaways

- Enterprises with formal telecom spend management programs outperform peers in cost reductions, productivity, and performance.
- Mid-market enterprises can learn from the Best in Class by establishing formal programs to manage telecom spend.
- Technology can be an enabler for both internal and outsourced total TTCM programs. Enterprises must understand TTCM solutions and how they can help control spend.

Aberdeen research revealed six major pressures driving companies to improve telecom cost management operations, and performance. Aberdeen’s PACE framework evaluates business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes (Table 2). The pressures, and corresponding actions or strategies enterprises will take to address these specific issues for mid-market TTCM are defined in Table 3.

Mid-market enterprises with formal TTCM programs generally perform better than those with informal programs or those without programs. In addition, automation provides a solid return on investment by eliminating inefficiencies. Notable metrics in which formal programs yield better results include reduced late payment penalties, identification of billing errors, reduced time to source contracts, percentage of telecom spend being proactively managed, and length of time in reporting telecom expenditures by time, organizational, supplier, or service categories (about 4 to 5 days for enterprises with formal programs versus 13 to 14 days for those with informal programs).

Table 2: PACE Key

Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:

Pressures — external forces that impact an organization’s market position, competitiveness, or business operations

Actions — the strategic approaches an organization takes in response to industry pressures

Capabilities — the business process competencies required to execute corporate strategy

Enablers — the key functionality of technology solutions required to support the organization’s enabling business practices



Table 3: PACE for Telecommunications Cost Management

| Pressures | Actions | Capabilities | Enablers |
|---|---|---|--|
| Pressure to manage wireless costs | Develop formal entitlement policies on use and expense policies. | Contract and policy compliance at order point to ensure employees order from approved vendors. | Establish inventory repository and life-cycle management for wireless/wireline services, telecom spending analysis, and procurement automation to track devices and services, assets, usage, and reconcile billing with contracts. |
| Need for greater visibility into spend | Aggregate, automate, and transition underperforming processes, assets, and management of wireless/wireline spending to new technology or third-party outsourcing. | | |
| Greater control over telecom assets | | | |
| Need for improved telecom invoice management | Automate manual processes and migrate from paper to electronic billing media. | Reduce cycle time to process invoices; establish more automated audit to ensure invoice accuracy; implement automated workflow to track missing bills, approval, and payment status. | System to upload electronic media. Relational database with invoice and contract reconciliation, allocation templates. |
| Adapt to new sourcing environment of consolidated carriers | Strategically evaluate vendors to ensure network redundancy and decrease unintended concentration of business resulting from carrier mergers. Initiate reverse auction to establish more competitive environment; | Align negotiation strategies with current carrier tactics. Leverage knowledge of real alternate providers of services. Establish "real-life" knowledge for how contract terms and conditions can impact your costs. | Establish central repository for contracts, and managed total telecom cost management services with alerts to allow for advanced negotiation of contracts and technology migration. |
| Management of technology migration for VoIP, MPLS, and remote employees | Build a detailed inventory of your network and review contracts for any issues with minimum annual commitments that could be triggered by migrating to new technology. | Establish project management responsibilities and be prepared to ensure old services are removed from billing as new services are added. | Leverage procurement system to track move add change disconnect activity, activity milestones, bill reconciliation, and contracted rates for new services. |

Source: [AberdeenGroup](#), June 2006

Measures for Success of the Best in Class

All top-performing enterprises have formal TTCM programs, but they distinguish themselves from other enterprises by proactively managing all or close to all of their telecom expenses. Key characteristics of top performers include:



- **Telecom cost management program longevity:** Eighty-three percent of top-performers have had TTCM programs in place for at least six months, including 61% that have had them in place for more than a year. The enterprises that have established programs are leaders and they consistently drive savings from their programs, show positive ROI and appear in our Best in Class rankings because they focus on managing their spend.
- **Greater sourcing efficiency:** Sourcing a typical telecom contract costs substantially less for enterprises with formal TTCM programs (\$12,150 vs. \$21,663). This is primarily the result of standardized sourcing procedures; dedicated telecom category experts, and use of sourcing automation tools and analytics.
- **Clear ownership of the budget:** Leading enterprises have a clear budget owner, with a mandate to act, and support from senior management. For emerging wireless services, these enterprises have policies that clearly identify the scope of their wireless programs, guidelines for ordering of services and devices, carrier selection, enforcement of the program, and centralized tracking of expenses.
- **Faster invoice auditing and processing cycles:** Leading enterprises take less time to process telecom invoices (average: 9.8 days vs. 13.6 for all others). They proactively track missing bills and are able to reduce unplanned service disconnects and late payment penalties (average 1.1% penalties vs. 2% for all others). They also take less time and resources to resolve disputes with telecom carriers. This is due to the use of automated invoice reconciliation and knowledge of how to file claims and escalate resolution through leverage of carrier relationships and knowledge of contract provisions.
- **Broader use of technology:** Top performers are more likely to use technology to help them achieve their TTCM goals, largely in analyzing invoices and usage as well as managing contracts. Many also use requisitioning and procurement applications for service orders, with an even larger number indicating that they're planning to adopt them within the next year. Top performers also leverage outsourced service providers to augment and accelerate TTCM initiatives.

Success Stories

Enterprises come to TTCM with different needs and seek different approaches to address their problems. Below are three examples that highlight different approaches to TTCM.

Association Chooses Outsourcing

Large industry associations require agility to add telecom services and ensure services are removed from billing after disconnect notices are sent out. After a new contract with reduced rates showed that its telecom expenses were going up, the association turned to an outsourcing company to provide it with resources to help it determine why their expenses were not going down and how to get telecom costs under control. They were also seeking to gain access to an approval/order tracking, inventory management application and reduce staffing required to process paper bills.

The outsourcer started by migrating the billing to electronic media. An informal approval process for new services was replaced with new policies and an application that sup-



ported the policy for those who could approve requests for new services. Wireless devices were incorporated into the program with monthly feeds from HR files to ensure former employees were no longer receiving cell phone service paid by the association.

The third-party provider was able to improve contract compliance by getting circuits and services ordered properly under the correct contract prices. Orders are now tracked and managed to installation with the outsourcer following up on open orders. Service disconnects are tracked and disputes are filled if disconnected services continue to appear in the billing. In the first year, the outsourcing vendor helped reduce expenses by 3%, or \$490,000. A comparison of cell phone users with HR files identified ten former employees that were having their expenses paid by their former employer. These lines were promptly disconnected for quick savings. In addition, the association was able to redeploy two Full time Equivalents (FTEs) from invoice processing and provisioning to more strategic areas. Information collected through the program is now providing a foundation for sourcing of carrier contracts for another round of savings.

Technology Firm Chooses Software

A software company realized it had outgrown customized spreadsheets with pivot tables that required manual entry of expenses. The company was seeking to establish an automated system to reconcile bills with contracts. The legacy spreadsheet approach identified spikes in billing, but this didn't help flag bills that contained improperly charged items. In addition, the legacy spreadsheet approach provided no review of line-item details from the bills. Reporting with the spreadsheets was a cumbersome process.

The company chose software because it had a number of former telecom employees managing the old program, but it wanted to shift the staff from tactical data entry functions to automated cost management.

The company started by centralizing bill receipt to its headquarters to remove inconsistencies in how bills were processed. An immediate benefit was shorter cycle times to process invoices. Managers are now using an online approval process that allows them to view billing details, add comments, and approve bills. Invoices that were routinely subject to late penalties have been reduced and tracking of receipt of bills through the software has helped identify invoices that arrived with dating that allowed less than two weeks for payment. Negotiations have begun with this carrier to establish extended payment terms for these services.

The savings from shorter cycle times to process bills and potential elimination of short-dated invoices will save approximately \$250,000. The contract verification process has identified services that have been disconnected and calculation errors that have helped return \$180,000 to the budget. Finally, reporting now simply requires a mouse click rather than a complicated series of time consuming steps.

A Hosted Solution for a Large Manufacturer with Limited Spend

A publicly-traded manufacturer of equipment for concrete and asphalt industries was seeking to measure usage and allocate expenses. The goal was to gain more transparency into expenses while reducing costs to process bills. It chose a hosted solution that enabled its finance department to outsource entry of billing from widespread locations. It also allowed the finance team to control allocations and the expense management function.



Regional sites had always controlled local telecom services, provisioning their own services and contracting for services with local providers. Meanwhile, headquarters managed long-distance services. This decentralized approach made it difficult to gain complete visibility into telecom services. The finance team wanted to reduce the barriers between local and long-distance services to leverage the company's overall buying power with the SBC, AT&T, and Bell South merger.

In January 2006, the company began implementing a hosted application. The program was delayed because the corporation did not have vendor information centralized. The initial approach to allocate by department was expanded to take advantage of EDI call detail records. Usage reports are now being sent to line managers to encourage greater accountability for expenses. In the first months, employees reduced services consumption 8%. Employees have been freed to focus on more productive work. Finally, the team is starting to look for alternatives to provide an opportunity for more competitive bids for local services and the long-distance contract, which will expire in November.



Chapter Three: Implications & Analysis

Key Takeaways

- Most of the initial interest from mid-market enterprises in technology or service solutions lies in augmenting their limited resources with streamlining invoice processing, process savings through use of charge-backs to promote accountability and reduce consumption of services, and auditing of bills.
- More mid-market enterprises are realizing the value of a more comprehensive TTCM approach from source-to-pay. This approach draws on technology and services to manage inventory, source telecom services and gain visibility into spend through reporting.
- Most centralized TTCM programs fall under the oversight of IT or finance departments, according to our survey results.

Under-performing enterprises have poor visibility into their spend, and they rely on labor-intensive processes to manage billing. Telecom expenses, particularly wireless services, are uncontrolled. As enterprises increase wireless spending, they need to identify opportunities to reduce costs in traditional wireline voice services. Many of the enterprises in our benchmark also indicated they don't have an accurate measure of their telecom spend, what is being tracked is a fraction of their total costs. This approach limits leverage when negotiating contracts. The mid-market benchmark have fewer formal programs than the large enterprise. This means there are more significant opportunities to rein in costs and establish better control of telecom with a strong return on investment for areas, not currently managed.

To implement the actions cited in the PACE chart in Chapter Two, enterprises should focus on four particular strategies:

1. *Aggregate, automate, and understand telecom spending for the enterprise to cut costs.*
2. *Develop or access telecom domain and process expertise and extended functionality through specialized TTCM software to track usage.*
3. *Develop standard procedures for managing and reporting telecom costs.*
4. *Transition underperforming processes, assets, and management of telecom to a third party for hosted or entirely outsourced solutions.*

These strategies are typically supported and enabled through technology or service support. The following lists and explains the three areas of managing telecom costs, with the management and technology enablers enterprises use.

Invoice Processing & Contract Compliance Auditing

Four of the top five technologies enterprises use as part of their TTCM strategies focus on cost control and contract compliance (Table 4): *invoice presentation and analysis*, *service usage tracking*, *invoice aggregation and payment*, and *service usage allocation/chargeback*. Spend analytics leverage data gathered from invoice processing and usage to provide an important driver for optimizing costs and negotiating sourcing gains. Technology and specialized knowledge of carrier billing can help enterprises address the biggest of the four pressures they face in telecom cost management: optimizing costs and streamlining operational performance and scrutinizing telecom bills for errors.

Benchmark participants cited “pricing competitiveness” and “billing errors” among the top metrics their companies use to assess a telecom provider’s performance. Nearly all indicated that costs are an important part of their performance measurements.

Table 4: Technologies Enterprises Use for TTCM

| | Use Now | Plan to Use within 12 Months | Plan to Use after 12 Months |
|--|---------|------------------------------|-----------------------------|
| Invoice presentation and analysis | 67% | 17% | 7% |
| Invoice contract reconciliation | 52% | 32% | 16% |
| Service usage auditing/accounting | 64% | 23% | 5% |
| Invoice aggregation and payment | 61% | 13% | 11% |
| Service usage allocation/chargeback | 55% | 14% | 5% |
| Inventory/asset management | 50% | 26% | 13% |
| Spend analytics | 40% | 26% | 15% |
| Rate database | 38% | 23% | 10% |
| E-procurement application for new service orders | 31% | 24% | 16% |
| Electronic contract management | 33% | 22% | 13% |
| Online RFX-based negotiations | 18% | 9% | 11% |
| Reverse auction | 13% | 13% | 4% |

Source: [AberdeenGroup](#), June 2006

Spend Analysis

Benchmark participants cited growing wireless costs and telecom spend visibility as their top two challenges in improving telecom costs and performance (Figure 5). These challenges mean that most enterprises must rely on vendors for critical data. Relying on vendor data for managing expenses is the business equivalent of having the “fox guard the henhouse,” and enterprises are often dubious of the reports they have received.



Spend visibility is a common challenge across all spend category management programs. Data is dispersed across multiple, disparate systems. This data is difficult to organize with definitions for services and fields varying by vendor. It is often rife with errors or omissions, making it difficult to classify for meaningful analysis.

Telecom Sourcing and Procurement

Interest in the use of electronic contract management is also evident in plans by 35% of our benchmark to deploy technology solutions. Considering that contracts are a critical foundation in TTCM, the current adoption rate is low. Forty-eight percent of the mid-market have no automated system to reconcile contracts to invoices. To meet the challenges of automation, 32% are planning to implement a program in the next 12 months and 16% are seeking to implement a program in the future.

Enterprises have not widely accepted e-procurement tools for new service orders. New initiatives from Verizon and AT&T promise to allow enterprise applications to provide true e-bonding to streamline order entry for carriers and enterprises. The current carrier practice requires enterprises to enter data into their system and place orders through indirect interfaces to the carriers which often require printing and faxing of orders. The carriers must then manually enter the order. Service order provisioning systems are expected to gain more acceptance as e-bonding becomes available over the next two years. More seamless connections will help to make this more attractive to enterprises and it will streamline the process for carriers as well. A good measure of this expected trend, is illustrated, by the fact that the number of survey respondents expressing interest in using these systems outnumbered those who are currently using them.

E-sourcing is also gaining in popularity. Online sourcing tools create competitive bidding markets that return, on average, about 15%.

Table 5: Benefits of Contract Management Automation

| Improvement Area | Performance Impact |
|-----------------------------|--|
| Compliance management | Improve compliance 55% |
| Rebate/discount management | Improve 25% to 30% |
| Material/service costs | Reduce 2% to 7% |
| Evergreen contracts | Optimize auto-renewal terms |
| Contracting cycles | Cut contracting cycles in half |
| Procedures and terms | Standardize processes and terms to mitigate risks, ensure proper approvals, enforce policies |
| Documentation and reporting | Cut reporting cycles from days to minutes |
| Contract analysis | Analyze and maximize performance |
| Administrative costs | Reduce 25% to 30% |

Source: [AberdeenGroup](#), June 2006

Because of poor spend visibility, as well as labor-intensive and fragmented buying processes, most enterprises re-source telecom contracts infrequently. Best-practice performers are leveraging e-sourcing tools, improved usage visibility, and enhanced market knowledge to increase the frequency and effectiveness of their telecom equipment and service sourcing to exploit fluctuations in market conditions and carrier strategies. Best in Class performers prepare for negotiations ahead of time and develop viable competitors to their incumbent providers to help drive down pricing. Most contracts have clauses that allow

for mid-term pricing reviews. Top performers are able use these opportunities as open-ended comprehensive reviews that drive more significant rate reductions. Knowledge is power when it comes to negotiation. Automation of TTCM gets you the information that you need and new reverse auctions help to create a competitive environment and streamline sourcing.

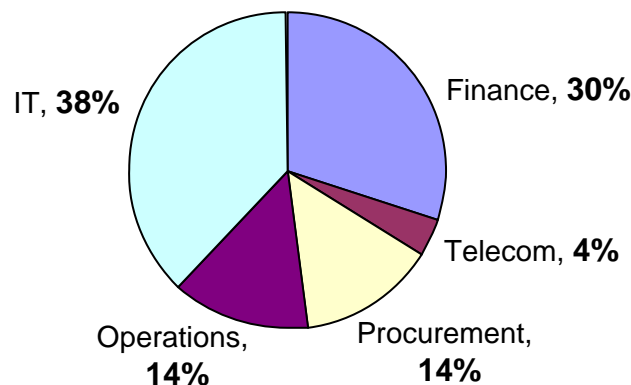
Governance: Who Should Oversee TTCM?

Mid-market enterprises that place one business function in charge of managing telecom costs give the job to either the IT or finance organization, according to the Aberdeen survey (Figure 6). And, close to three-quarters of top-performing companies in this survey have either organization in charge of managing telecom costs. Our respondents indicated these two functions appear to deliver good results, for instance:

- **Eighty-five percent** of enterprises whose IT organizations were leading their TTCM efforts experienced rate decreases, while 50% of companies with finance leading the way won better terms and conditions from suppliers.
- **Time to source a contract:** It takes an average of slightly less than three months for a finance-led organization to complete the sourcing of a contract. For the entire survey field, the average was slightly more than three months.

Would finance or IT do a better job overseeing TTCM? Or might the procurement or operations function fare better? Aberdeen believes a formal program, centralized in one corporate function closest to the most critical data and which is the most informed at making decisions, is best suited for the role. Centralization is key because mid-market enterprises need to maximize all of the volume for leverage with vendors. Also one function should have the authority to make decisions and ultimately be responsible for this category. The fact that so many enterprises place IT in charge and that they deliver benefits, indicates enterprises appear to believe networks require alignment with IT. This is not a bad development providing it is grounded with a strong financial focus and good alignment with competitive procurement practices.

Figure 6: Primary Enterprise Responsibility for Managing Telecom Costs



Source: AberdeenGroup, June 2006



Chapter Four: Recommendations for Action

Key Takeaways

- Best in Class enterprises have faster invoice processing and auditing cycles and greater sourcing efficiency.
- To achieve Best in Class results, enterprises take a centralized approach with clear ownership of the budget and focus on TTCM programs.
- Technology solutions, either through third-party outsourcers, hosted applications or licensed software, are critical to automate invoice processing, ensure contract compliance, and drive visibility into spend.

Cost reduction remains an important factor in improving corporate profitability. Spend management may not have a triggering event to rally an enterprise to act the way Y2K spurred enterprises into action. A current wave of concern over rising wireless costs is galvanizing some enterprises into action.

As networks converge and vendors blur, the previous government-mandated, barriers between local and long distance services are starting to come together. Calls are increasingly made using data circuits and many of the carriers will soon offer one contract for local, long distance and wireless services. It helps to manage all of it as one network and to negotiate all services that you procure from a provider at the same time. This will provide efficiencies from looking at things together and packaging volume from all services together for volume discounts. This is not to suggest that one carrier should get all of your business. However, knowing what your entire spend is and using this information to have vendors compete for your business will get better results.

Benchmarking the Current Process

The best place to begin is by getting an inventory of how telecommunications is currently being managed. Below are some areas to consider in the benchmark analysis. How are telecom costs being managed today?

Do you have performance measures for:

- *Your total expenses by vendor?*
- *The volume of invoices processed?*
- *The percent of billing received electronically versus paper?*
- *The average time to process an invoice from receipt to payment?*
- *The cost of late payment penalties?*
- *The average number of days to resolve missing bills?*
- *The number of disconnect notices received from carriers?*
- *The total billing errors identified and refunds secured?*
- *Total costs to manage the current program?*



Recommendations for Laggards

Below-average performers must identify a clear budget owner, secure a mandate to act, and centralize management of telecom expenses. They should start by automating invoice processing and work to reduce the cycle time from receipt to payment of bills. The focus should be on streamlining labor intensive processes and reducing late payment penalties. Bill validation for these performers focuses on threshold audits that flag variances in billing, duplicate invoices, slamming (when your provider has been switched without your approval) and cramming (charges for services you never ordered, authorized, received, or used). Telecom contracts should be gathered to determine renewal dates and opportunities to negotiate better rates during mid-contract pricing review periods. Competitive pricing benchmarks will help determine if your rates are competitive. Finally, the terms and conditions of the contract should be reviewed to determine if there are liabilities and other unfavorable language.

Recommendations for Industry Average Enterprises

Look to address inefficiencies and areas for optimization. Average performers find reverse auctions for sourcing help to compress timeframes to negotiate contracts. Procurement tools can streamline MACD activity, and drive compliance with corporate wireless programs. Look to automate billing reconciliation with your inventory. Physical inventories can help identify lines that are not installed, circuits that have no cross connect, and other services that are not working properly. These inventory issues can be used to obtain refunds and reduce future expenses. Invoice processing software should have special contract pricing entered into the system to provide line item audits of billing.

Average performers should seek to use expense allocations and usage reporting to improve accountability for the services that are being used. Wireless services should be reconciled with employee files to ensure services are discontinued when employees leave the enterprise.

Recommendations for Best in Class Performers

If your company is an above-average performer and is looking for new areas of innovation, use inventory data to optimize the network. Expense chargeback allocations should provide reporting to individual user. Review how new service orders are being accrued. Many enterprises over estimate future costs because they do not have good visibility into their spend. Above-average performers should reduce the drag on finances that comes from poor accrual estimates. Above-average performers can be on the cutting edge leveraging their entire spend (local long-distance and wireless) with carriers to create a stronger bargaining position in pricing discussions. Finally, above-average TTCM performers should think globally. Most TTCM programs struggle to centralize their domestic spend, above average performers should seek to look at their telecom expenses in other countries. Domestic programs for sourcing, invoice processing, expense allocations, procurement and reporting should be applied to international expenses.



Steps to Success

To ensure your enterprise is getting the most out of what it spends on telecom, Aberdeen recommends the following:

- **Centralize oversight of your TTCM program.** Aberdeen's research has found — in two research reports — that the most successful programs are handled by one corporate function, usually IT or finance. Aberdeen recommends that the function with the best visibility into this expense should take the lead role.
- **Understand all telecommunications services spending and analyze it on an enterprise-wide basis.** Look not only at local/long-distance and data network access, but conference calling, toll-free services, and wireless services. Be sure to drive TTCM across all divisions nationwide, then globally.

Procuring TTCM Services

- **Licensed software or On-Demand, ASP and Software as a Service (SaaS) may be good options for enterprises seeking to do more of the work themselves.** If the resources are available, you may want to manage the TTCM program with your own staff. Managing the program internally means there are no third parties interpreting your needs. Your enterprise has direct control over staffing for the project, salary, and retention programs. Vendors also offer hybrid models in which they host the software and load billing into the software. This can provide a critical foundation and free your resources to focus on the higher value areas.
- **Outsourcing may be a quick, low-risk way of ratcheting up your TTCM performance.** Telecom requires people with specialized knowledge. Many mid-market enterprises find they do not have the people and the resources to manage telecom internally. A firm that specializes in outsourcing should be able to drive significant benefits from economies of scale. Specialists are able to apply what they learn from each client's project and share best practices across all their clients.

Not all vendors scale down to meet smaller projects. A number of outsourcing vendors have minimum fees of \$7,000 to \$10,000 per month. If your telecom expenses are less than \$700,000 for wireline services, be direct with TTCM vendors. Before engaging in lengthy meetings or sending out RFPs, ask if they have minimums for basic invoice processing and reconciliation services. It is best to focus on vendors that will provide the best fit based on your size and needs.

When evaluating vendors, pay special attention to how they can help you move to electronic billing media. Vendors have varying expertise and capabilities to load billing into their system. To determine which billing can be processed electronically, vendors need a comprehensive list of your carriers and the types of services you purchase from each carrier. Also it should be noted smaller carriers may not be able to provide billing in electronic format. Be sure to select a vendor that can handle paper bills if they will represent a large portion of your billing after conversion to electronic media for everything else. Some engagements fail because the billing can not be processed electronically and there is poor execution in getting paper bills into the system and processed in a timely fashion.



Depending on your carrier mix it may be necessary to load a significant amount of paper bills. How you will get paper bills processed may be a critical consideration in selecting a vendor.

In conclusion, TTCM can provide real benefits in terms of cost savings. These cost savings can be directed to bottom line profitability. The savings can also be used by IT to shift funds from the operations budget to special projects that drive innovation for the enterprise. The savings are real but you must act to capture them. TTCM does not have a triggering event or catalyst that will galvanize action like Sarbanes-Oxley legislation Y2K. It is up to you to take action to make the savings real.



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Joe Basili is a researcher, writer, and consultant for invoice reconciliation, payment, and total telecommunications cost management for businesses, government, and educational institutions. Through fact-based research reports, public speaking, and advisory meetings he provides best practices on how organizations can optimize their information technology (IT) systems, telecommunications network costs, operations, and procurement.

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Rick Saia focuses on the use of technology in the global supply management arena and most recently assisted in the development of research in Aberdeen's Information Technology practice area, especially the recent *SOA in IT Benchmark Report*, and current surveys on enterprise applications and network application processing. He has extensive experience writing and editing on information technology topics. His experience includes senior-level editorial positions at *Computerworld* and *Cutter Consortium*.

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Appendix A: Research Methodology

In December 2005, **AberdeenGroup** examined the benefits that 90 enterprises have been realizing from total telecom cost management (TTCM) solutions, as well as the processes, metrics, and organizational factors that go into the management of telecommunications expenses and the sourcing of telecom products and services.

This follow-up survey, conducted in May and June of 2006, identified the benefits TTCM solutions are delivering for enterprises today.

The respondents, who came from a variety of industries, completed an online survey that included questions designed to determine the following:

- The percentage of telecommunications spending under proactive management;
- The degree of centralization to which enterprise TTCM programs are being guided, and which parts of the enterprise were primarily responsible for managing telecom costs;
- The specific technologies enterprises are using to help manage telecom spend and the technologies they're planning to implement over the next two years; and
- How much enterprises are spending on telecommunications and where their TTCM programs have been helping them save money.
- The benefits, if any, that have been derived from aftermarket and service parts management initiatives

Aberdeen supplemented this online survey effort with e-mail and telephone interviews with select survey respondents, gathering additional information on telecom cost management strategies, experiences, and results.

Responding enterprises included the following:

- **Job title/function:** The research sample included respondents with the following job titles: senior management, such as CEO, CFO or COO (30%); manager (33%); director (22%); staff (7%); CIO or IT leader (7%); internal consultant (5%); and senior vice president or vice president (7%).
- **Industry:** The research sample included respondents predominantly from services industries. Telecommunications services providers represented 21% of the sample, followed by finance/banking/accounting (11%). High-tech/software companies represented 23% of the respondent pool. Other sectors responding included construction/architecture/engineering, distribution, education, consumer electronics, food/beverage, health/medical/dental services, health and beauty aides, industrial equipment manufacturing, mining/oil/gas, paper/lumber/timber, public sector, retail, telecommunication equipment, transportation/logistics, travel/hospitality/restaurant, utilities, and wholesale.



- **Geography:** Most study respondents were from North America (66%), with 21% from Europe, 8% from Asia/Pacific, 3% from the Middle East and Africa, and 2% from South/Central America and the Caribbean.
- **Company size:** About 28% of respondents were from enterprises (annual revenues above US\$1 billion); 25% were from enterprises (annual revenues between \$50 million and \$1 billion); and 47% of respondents were from businesses (annual revenues of \$50 million or less).

Solution providers recognized as sponsors of this report were solicited after the fact and had no substantive influence on the direction of *The Challenge in Total Telecom Cost Management: To Unlock Savings and Control Spend, Mid-market Enterprises Can Learn a Few Lessons from Leading Enterprises*. Their sponsorship has made it possible for **AberdeenGroup** to make these findings available to readers at no charge.



Appendix B: Related Aberdeen Research & Tools

Related Aberdeen research that forms a companion or reference to this report include:

- [*The Total Telecom Cost Management Process Benchmark Report*](#) (February 2006)
- [*The Wireless Costs and Performance Benchmark Report*](#) (March 2006)
- [*Spend Under Control Key to Cost Savings: The Category Spend Management Report Series 2004 – Telecom*](#) (June 2004)
- [*Best Practices in Telecom Cost Management*](#) (March 2005)
- [*The Contract Management Benchmark Report: Procurement Contracts*](#) (March 2006)
- [*The CFO's View of Procurement*](#) (September 2005)

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