

# Business Intelligence: The Key to Telecom Expense Visibility and Control

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## An Industry White Paper on Applying Business Intelligence to Telecom Expense Management

### **Introduction:**

One of the top five corporate expenses in most companies is telecom. Yet for the IT organizations whose responsibility it is to control these costs, trying to get a handle on spending is next to impossible. Most lack the visibility into expenditures for wired and wireless voice and data networks to make educated, business-focused decisions.

Yet, visibility is essential to reducing costs and making fast-paced, forward-thinking decisions on telecom infrastructure buildouts such as voice over IP and enhanced VPN networks that could help a company gain a competitive edge. Too often, IT organizations that lack a clear view of their telecom inventory and expenses are forced to fly blind and miss out on major opportunities.

However, a new crop of tools that blends the data-gathering power of automated telecom expense management and the analytic braintrust of business intelligence is offering IT, and other business leaders, unprecedented end-to-end visibility into their telecom network spend.

The combination of these two forces enables organizations to make rapid-fire, targeted decisions that result in immediate cost savings and improved business processes.

These tools allow IT to share important information regarding circuits, service contracts and other telecom expenses with stakeholders along the decision-making path. Armed with this data, business leaders can streamline operations in a timely and logical fashion.

More importantly, they can use the dashboards, graphical reports and analytics within the business intelligence tools to project forward. Analytics and alerts allow IT and business leaders to improve telecom infrastructure planning, budgeting and forecasting. The information derived from these tools also allows IT to create solid benchmarks based on past performance and industry standards. In addition, organizations can perform rapid analysis of their networks to gain optimal price/performance metrics.

As IT organizations switch from being reactive to proactive about their telecom spending, the natural result is that telecom expenses are no longer an out-of-control mystery.

## **Business Intelligence: a Top Three IT Initiative**

According to Computerworld's 2006 IT Leader Survey, business intelligence is one of the top three IT initiatives today. In fact, according to Gartner, the business intelligence market is expected to grow from \$2.5 billion this year to \$3 billion in 2009.

The technology is used by many Fortune 1000 companies to do everything from analyzing and spotting sales and marketing trends to forecasting financial performance. At its core is sophisticated technology that enables data to be "diced and sliced" so that relationships and trends can be analyzed and reported in a simplified manner.

Applying business intelligence technology to telecom, a top five corporate expense item, is only logical. IT organizations are flooded with telecommunications infrastructure components that help keep their increasingly mobile workforces connected to mission-critical data. As one IT executive said, "Telecom is now 300,000 different products. There are so many products and services – legacy and new – that it's hard to get your arms around it."

In the past, IT executives have tried to tackle the problem by devoting time to manually pouring over mounds of spreadsheets, trying to spot errors in invoices or locate over-provisioned circuits. But this takes manhours that most IT groups can't afford.

More recently, they've employed telecom expense management (TEM) lifecycle automation to manage their expenditures. These tools allow them perform critical functions such as procurement and provisioning, invoice auditing, and asset and inventory management and to capture data on all these different areas. TEM lifecycle automation enables IT groups to rapidly save hundreds of thousands of dollars on circuit, contract and other expenses.

The next step for IT is to make this data work for them and give them control over current and future spending.

## **TEM Meets Business Intelligence**

Through applying business intelligence to telecom expense management, organizations can reap significant rewards. Drawing on information that is stored in the automated lifecycle management repository, business intelligence tools add a new level of value to the data.

Information is automatically analyzed and presented to IT executives and business leaders in dashboards, detailed graphical reports and other forms of customizable analytics. Important players along decision chains receive real-time information about the company's telecom network investment.

Business intelligence tools let users track key performance indicators that are relevant to them in real time with easy-to-understand gauges, graphs and charts. These tools also generate reports that show important metrics such as minimum annual revenue commitment and the telecom spends for carriers and service types. Users can customize the data to fit their needs and can create ad-hoc reports with wizards or drag-and-drop functions.

Business intelligence tools are also able to take data and use it to project into the future. These tools support what-if analysis, forecasting, trending, planning and predictive modeling. Users can employ this data to optimize networks in terms of price and performance. For instance, finance managers can use a customized dashboard to analyze how to adjust spending on service providers. They can view by invoice breakdowns, and order status.

Using this information can help determine how to renegotiate contracts and whether to reallocate resources in the future.

Business intelligence tools can also be used for critical what-if scenarios such as whether to convert from frame relay to MPLS. Users can perform a detailed analysis that takes into account key parameters such as number of sites to convert, average of savings per circuit and equipment/install costs. They can see a detailed view of how their investment would play out over a certain time period.

In all cases, decision makers are able to access the data they need in the format that is best suited to them.

**Summary Dashboards for Visibility**  
 - 'At a Glance' visibility into Key Performance Indicators  
 - Alerts users to potential issues  
 - Proactive review of trends

**First Click: Access Detailed Information**  
 - Provides more information to diagnose potential problem areas

**Second Click: Take Control**  
 - Direct access to the Rivermine application where data can be input and action taken

| Finance Account              | Invoice Date | Invoice    | Billing Issue Creation Date | Billing Issue Status | Billing Issue Type | Billing Errors - Disputed Amount | Billing Errors - Amount Credited |
|------------------------------|--------------|------------|-----------------------------|----------------------|--------------------|----------------------------------|----------------------------------|
| Sprint 13073703, Master      | 2/1/2006     | 04178478   | 6/12/2006 16:27:20          | closed               | credit             | \$50,200.00                      | \$50,000.00                      |
| Sprint 13073703, Master      | 2/1/2006     | 04178478   | 6/12/2006 16:28:42          | closed               | credit             | \$1,000,000.00                   | \$1,000,000.00                   |
| MCI00105046, Master          | 12/20/2005   | 60110406   | 6/29/2006 08:54:49          | closed               | credit             | \$100,000.00                     | \$20,000.00                      |
| MCI00105046, Master          | 12/20/2005   | 60110406   | 6/29/2006 08:57:45          | closed               | credit             | \$50,000.00                      | \$40,000.00                      |
| MCI00105046, Master          | 2/20/2006    | 60330388   | 6/12/2006 16:33:13          | closed               | credit             | \$80,000.00                      | \$38,000.00                      |
| AT&T 18000041907, 0000798525 | 6/9/2006     | 2033359915 | 6/15/2006 11:20:11          | closed               | credit             | \$50.00                          | \$35.00                          |
| AT&T 18000041907, 0000424581 | 6/5/2006     | 2033359915 | 6/12/2006 14:51:49          | open                 | credit             | \$200.00                         |                                  |

Customizable Dashboards and drill down detail provides visibility and control over telecom spend

## The Results

One IT manager said that while telecom expense management tools helped him correct invoices and improve SLAs, adding business intelligence capabilities has allowed him to be proactive about companywide infrastructure.

For instance, using business intelligence software, he noticed that users in the company's small offices were relying more on their cell phones than the local lines. He decided to reduce the number of local trunks at the 65 sites he surveyed. "By analyzing the data, we knew that people weren't using local phone lines as much so why pay for so many local services at those sites? We were oversubscribed so we right-sized." Within a year, he was

able to pull out almost 15% of the local phone lines and hopes to do an additional 20% this year, saving the company a significant amount of money in telecom expenses. Companies also use business intelligence tools to offer decision makers targeted views of data. This can ease the overall IT burden. For instance, one company lets operations, which handles network installations, view certain data so they can decide what circuits, hardware and services need to be ordered. Managers are given access to see if their employees are overusing cell phones and other company-supplied tools. And Human Resources is able to validate that certain employees are eligible for cell phones, pagers, calling cards and other perks.

Another benefit to business intelligence is being able to match resources to employees so no telecom investments go to waste. IT managers say the foundation of telecom expense control is to make sure that every device, circuit and service is mapped to an individual. Using location analysis tools tied to business intelligence, IT groups can delve down to see which users are using what resources at what location. Instantly, they can tell if an employee is no longer with the company and should have his service shut down, if the site and employee have moved, or if the employee is not using a service because it doesn't work or their hardware is broken.

One IT executive uses the business intelligence capabilities of his telecom expense management tool to inventory every employee, all telecom services and hardware, and every real estate parcel that the company owns or leases. He says that mapping all three gives him the most comprehensive view possible of his enterprise. In one instance, he found the company had been paying for telecom services at a site that had been vacated for more than a year. When he ran a check of the site against employee locales, he found no employees were listed there and was able to cancel the services. For complete accuracy, he allows HR and Physical Plant access to the tool.

Another IT executive says he uses business intelligence to gain visibility and control over telecom networks in the wake of his company's mergers and acquisitions. "The problem we had is that we had grown so quickly by acquisitions. We had a plethora of vendors and had no understanding of what resources we had," he said.

He used the business intelligence in his telecom expense management tool to obtain an accurate inventory of the combined companies' assets. "We had to understand all of our spends. We had to know if what we had was needed, was it the right type of equipment, could we consolidate," he says.

He was then able to provide access to this information to the networking team so they could make important decisions. "You need someone with knowledge monitoring all this. They have access to inventory and bills." With the tools in place, he says he's able to run what-if scenarios that show how replacing one service with another will shake out and what money will be saved.

## **Getting Started**

For organizations, telecom spending will continue to be an imposing cost. Management of cellular, wired and wireless voice, data and video networks will challenge even the most efficient organization.

However, by applying business intelligence to automated telecom expense management lifecycle tools, IT will be able to gain the visibility and control needed to keep these costs under control. They will also be able to make smart, fast-paced decisions about future telecom spends that will offer their organizations a competitive edge.

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*This industry white paper was commissioned by Rivermine. Rivermine is a leading provider of telecom expense management software and managed services that automate the entire telecom lifecycle from contract sourcing, service ordering and provisioning, to invoice processing, auditing, and payment.*

*Rivermine Clarity™, the most advanced business intelligence and telecom expense management module, provides unparalleled visibility into your telecom environment through advanced reporting and analysis capabilities. Built in conjunction with the leading business intelligence provider, MicroStrategy®, Rivermine Clarity arms you with the data necessary to make better and faster decisions about your network.*

*To learn more about Rivermine Clarity and how business intelligence coupled with telecom expense management can help to dramatically reduce your telecom expenses, please visit [www.rivermine.com](http://www.rivermine.com)*

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