MBG

White Paper

Telecom & IT Consumption Management

The New Imperative

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Telecom & IT Consumption Management

I. The Problem — Too Much of a Good Thing

Technical and commercial advances in communications over the past decade have been fast and furious. What was once a stable industry providing basic analog voice and data services has now blossomed into an exploding array of both new and converged technologies. These developments have drawn new competitors into the market, challenging traditional telecom carriers. Advances in both wireless and digital services have also helped provide the fuel for the information age, allowing for the rapid and cost effective exchange of information worldwide.

Consumption management is the process by which the use and cost of a communications resource is recorded, analyzed and managed to influence behaviors that drive more productive and cost effective communications.

It is a commonly held belief that these new technologies have driven down communications costs for many companies. However, this is proving not to be the case. According to a 2003 survey conducted by the Cellular Telecommunications & Internet Association (CTIA), since 1998 the average consumption of minutes by consumers has risen over 250 percent. This led to the average cellular bill increasing by 27%. For example, contrary to popular perception, wireless costs far exceed those of landlines in many cases. The average cost of wireless voice service is 10 cents per minute versus three cents for landline.

Unless companies clearly understand and control such cost differentials, their managers and users cannot make prudent and economical use of the various technologies available to them. Furthermore, the reality is that these advances have also accelerated the adoption rate for new technologies. Executives and employees are likely to use even more services to keep up and "remain competitive".

a) The Landscape: Proliferation of New Technologies

For increasingly cost-conscious companies, the growing array of new products and services produced by the convergence of telecom and IT has become a dilemma. New technologies - including VoIP, wireless VoIP, WiMax, and unified messaging - are being rapidly adopted. Industry estimates suggest that by 2008, 44 percent of all corporate lines will be VoIP. By 2009, it is estimated that there will be 8.5 million WiMax subscribers. This is supported by the fact that handheld device manufacturers report torrid growth with millions of new users each year.

Today's corporate road-warrior is likely carrying a cell phone, a BlackBerry or similar PDA device, a laptop computer equipped with VoIP technology, smart cards to access both voice and data networks and more. Intelligent use of all these devices is far from a reality today. You might hear a typical executive say, "My cell phone works in my office but not on the train during my commute. My BlackBerry doesn't work in the office but works fine on the train." And many executives traveling to Europe on business carry yet a third phone for international use.

While the base cost of these new technologies is a fraction of traditional telecommunication costs, previous technology transformations have shown a large increase in usage. Because telecom-IT convergence will reduce the cost of basic services, carriers providing those services need to shore up their revenue streams to be profitable. For the most part, they will achieve that goal by introducing an array of new features and services layered on top of basic service. They also take advantage of "the cool factor," the buying frenzy triggered by the introduction of hot new technology. Regardless of need or cost, people scramble to own the latest "hot" device.

By expanding the number of users lured by the lower base cost, providers will create a large customer base to consume these new services. One needs to look no further than today's increasingly "smart" phones to see this phenomenon at work. In addition to the core phone services like voice mail, call waiting, and call forwarding, are newer offerings such as text messaging, Internet access, digital camera and video capabilities.

While long distance costs via *landline* have been driven down to **under 3 cents a minute**, for *cell phones*, the cost per minute for peak time can range between **8 and 10 cents**

Clearly some of these new services, used judiciously, will provide valuable new capabilities for workers, increasing productivity and enhancing collaboration with co-workers, customers, and business partners. At the same time, there is some risk of misuse or abuse of these services at the company's expense. The challenge is not to unilaterally restrict these services, but to intelligently monitor, control and account for them as part of overall corporate resource consumption management.

b) The Dilemma: Blurring costs and controls

Increasingly, large corporations are struggling to gain control over the proliferation of devices, both corporate and personal, that employees are plugging into the corporate network. Since many corporate users expense much of their use as business-related, these users are typically not as price sensitive as individual consumers. In the near term, as cell phones, BlackBerry devices, and other communications hardware multiply and become even more feature-rich, that struggle for control will only get worse.

Of even greater consequence is the fact that many personal digital assistants (PDAs) are now part of the corporate network and not merely personal devices used occasionally. Most BlackBerry devices and similar hardware routinely handle corporate e-mail and other potentially sensitive or confidential content. Companies must assume complete responsibility for these devices, further adding to IT management complexity.

Another rude surprise that awaits companies is the technical limitations inherent in telecom's assimilation into the typical IT infrastructure. VoIP is a perfect example. While less expensive than traditional telephony, it is more difficult to get call detail data that can identify who is making and receiving calls, making it difficult to verify charges or make sure the contractual usage rates are being applied properly. Without this type of information, charging back these costs can be a challenge.

c) The Danger: Hidden Costs Exposed

Studies of telecom spending have consistently revealed that most companies do not closely track and verify their telecom spending. For most enterprises, telecom is one of the top five line item expenses and it ranks third in non-payroll expenses. But today, according to the Aberdeen Group, 50 percent of all invoices are inaccurate and approximately 85 percent of telecommunications bills are not audited and simply paid in full. Implementing comprehensive and aggressive Telecommunications Expense Management (TEM) controls can, according to Aberdeen, reduce annual communications costs by 18 to 26 percent.

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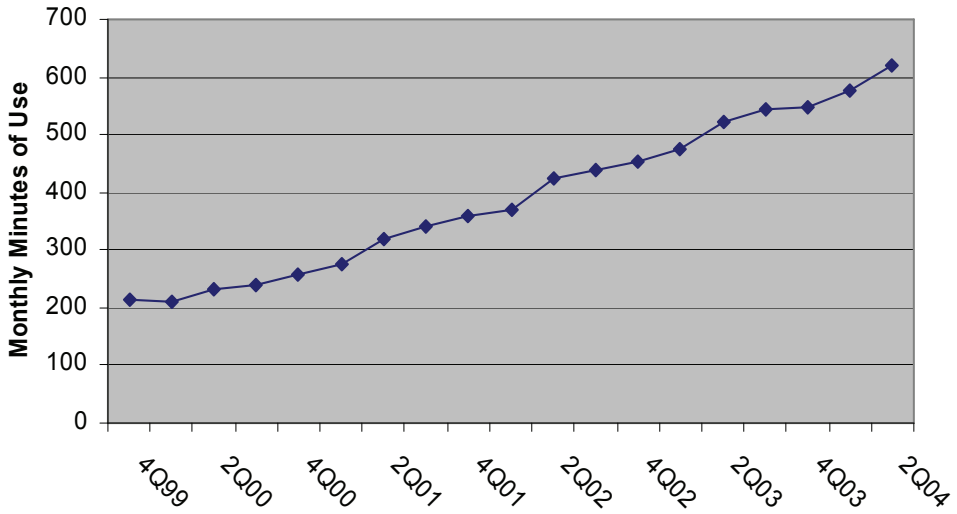
With the convergence of telecom and IT, that spending will increase significantly. Today many business customers receive more than 1,000 telecom-related bills per month. The number of bills will surely increase with new wireless and mobile device spending.

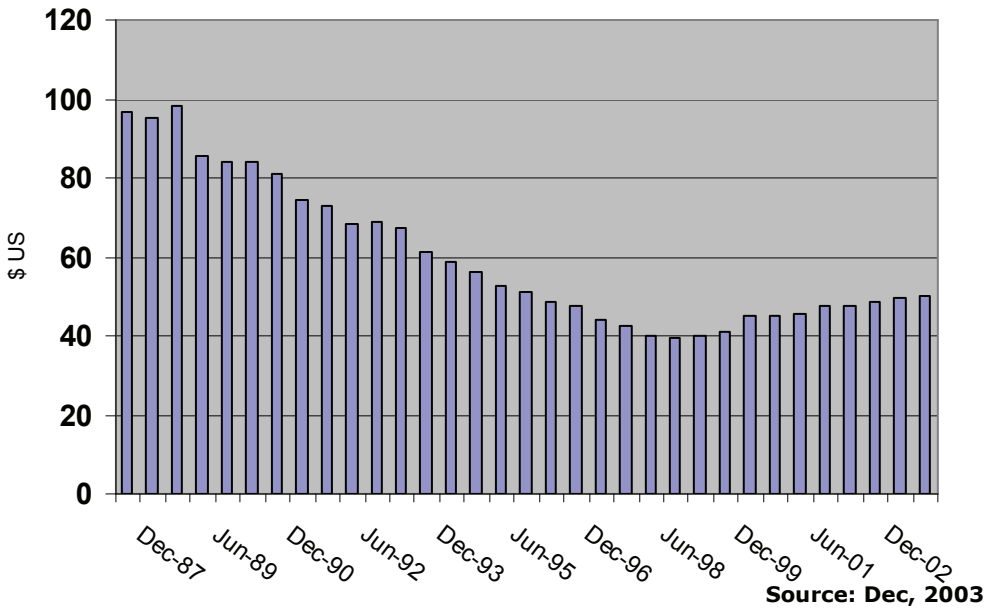
Evidence of these problems is mounting. Telecommunications costs, which had steadily declined in recent years due to improved corporate management and carrier price competition, are now beginning to rise once again. Lower basic costs are being offset by increased and more indiscriminate usage of wireless services such as cell phones and PDAs.

Graph 1 - Cell Phone Usage on the Rise



Source: Dec, 2003

Graph 2 - Average Monthly Cell Phone Bill



Source: Dec, 2003

II. Consumption Management Defined

For the purpose of this white paper, consumption management is defined as:

- Focus on impacting usage behavior to reduce costs;
- The leveraging of order management, inventory and chargeback to support corporate procurement policies;
- Enabling operating managers to benchmark their spend against similar departments, resulting in overall reduction of communications costs.

a) The Origin: A Brief History of Consumption Management

The concept of consumption management is not new. It has been proven effective in other markets, like energy, over many years. It requires becoming expert in determining how products are consumed, at what rates, and for what reasons. Timely and reliable data is the key to managing the consumption of resources.

In the aftermath of the California energy crisis in 2001, electric utility companies began to aggressively recruit consumers in campaigns to reduce overall energy consumption by devising more efficient and economical ways of using electrical power. The most effective approach was two-pronged, providing both utility companies and consumers with valuable energy consumption data and feedback programs that educated all parties on inefficiencies, some obvious, some hidden.

Energy companies discovered that "the devil was in the details" of usage and that excessive, wasteful use of energy could be curbed with the proper tools and knowledge. More sophisticated metering and usage analysis revealed consumption excesses that were easily cured.

The common denominator for lowering consumption costs is timely, real-time knowledge about how the resource is being used. That detailed information, once analyzed, allows for corrective action. It sounds the alarm, signaling the urgent need to apply consumption management principles.

b) The Context: Consumption Management Roots in TEM

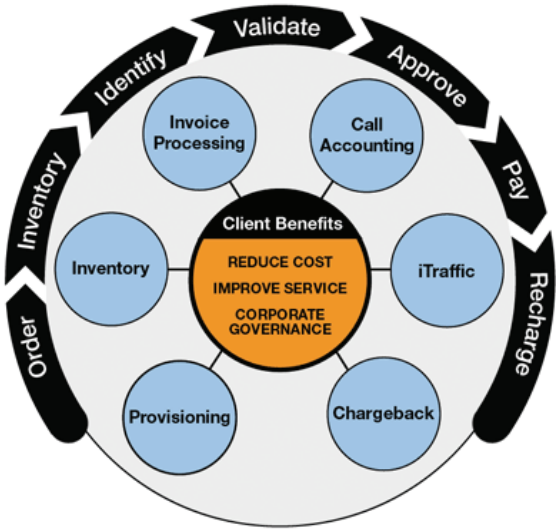
Expertise and understanding of telecommunications data enables a company to optimize and enhance its overall business performance and competitiveness. By breaking down telecommunications data and having it presented clearly and consistently, companies can view costs across all of its vendors. The result is that companies are able to control telecommunication costs by having the ability to quickly analyze and compare their enterprise-wide voice, data, and wireless telecommunications costs across every business unit.

Modern Web-based, end-to-end enterprise telemanagement solutions that include: provisioning, inventory, invoice processing, call accounting, and corporate chargeback, provide a comprehensive foundation for consumption management. These solutions have historically integrated important telecommunications IT expense management and service delivery processes to improve overall operations and bottom line performance.

The best TEM offerings are process-focused, providing customers with the ability to integrate telecom information with an expanding array of enterprise systems including operations support systems (EOSS) and enterprise spend management (ESM). They can then perform "bottoms-up"

accounting of IT spending and the return-on-investment from those expenditures. The core processes include the optimal provisioning of required services, accurate inventory of hardware and subscribed services, analytic capabilities to identify invoice discrepancies against actual consumption, the ability to validate billing rates against pre-negotiated contracts and the chargeback of services to departments where behavior can be influenced to effectively assure costs are in line with business needs.

Chart 1 – Telecom Expense Management Core Processes



III. Drivers of Consumption Management

Consumption Management has been brought to the forefront in telecom through the promise of streamlined telecom services that are managed more efficiently and economically through an automated TEM solution. The driving force behind this push to manage actual usage behavior has been network convergence, increased wireless services, and a mobile workforce.

a) Network Convergence

During 2004, VoIP became the technology of the year. Fortune 500 companies such as Ford Motor and Boeing announced major migrations to VoIP, putting the technology into the mainstream. Furthermore, equipment makers such as Cisco and Nortel have made major strides towards improving the reliability and quality of VoIP.

The attraction of VoIP is that it brings fixed rates, regardless of usage. The impetus behind consumption management has been that companies should conduct traffic analysis to determine if it is cost effective to make the migration. If the utilization is not enough to justify the migration, then VoIP can be a more expensive proposition than traditional telephony. As more companies make these decisions they are realizing that understanding utilization and traffic patterns is critical in achieving real costs savings.

b) Wireless

To keep pace with business, what was once considered a luxury is now a necessity. While it is true that rates have fallen for wireless services, the reality is that these services are still on average 70% more expensive on a per minute basis than landlines. The explosion in wireless services has led to huge expense for most companies. The problem is not that they are necessarily a big expense, but rather that most companies are realizing they have no way of tracking usage. Many organizations do not have defined and monitored usage policies in place. The result is often duplication of services and out of control usage.

c) Mobile Workforce

Enhancements in communications have allowed staff to be more mobile and work from literally anywhere in the world. Beyond wireless services and the Internet, this means organizations are consuming more Web conferencing and video conferencing resources. Without carefully tracking the usage of these services, organizations can find themselves spending on services that are under or over utilized. In addition, many organizations will establish a link for a video or audio conference and not take advantage of the benefits during a 1 hour meeting. If managers had regular visibility into these costs as they are consumed, appropriate steps can be taken to modify behavior and reduce unnecessary costs.

IV. The Plan: Executing Your Consumption Management Strategy

The key steps for developing an effective consumption management initiative are intuitive upon first glance, but challenging to execute if controls and systems are not in place for ongoing management. The following outline includes suggestions for implementation of an effective consumption management strategy.

1. **Define your corporate "wireless" policy** - this important starting point includes defining (or updating) policies and taking steps to assure that executives manage by them.
2. **Renegotiate corporate "wireless" contracts** – today's wireless market is very competitive - having detailed knowledge of your current usage is crucial for negotiations.
3. **Implement an integrated order management system** – internal provisioning systems should have the controls in place as dictated by the corporate communications policies.
4. **Define your corporate chargeback strategy** – Department managers should understand the chargeback approach and be able to ask questions and view detail as necessary.
5. **Allocate charges** – with department visibility towards costs that can be influenced by behavior changes (ex. No show teleconference reservations, unnecessary video conference usage, etc.)
6. **Benchmark costs across operating** departments – comparing costs across similar departments and employees can be an effective measure to keep costs under control.
7. **Educate employees** – many employees are not fully aware of the cost implications of some of their expensive communications "habits".
8. **Maintain an ongoing review of costs** – effective consumption management is not a 90 day initiative. Continued monitoring is critical to achieve ongoing savings.

For many organizations, a TEM solution can provide the ability to track usage for the expanding range of traditional telecom equipment, wireless phones and PDAs, Web and video conferences, and other devices. Companies must gain control over the chaotic procurement processs for these devices that will make up the converged network of the future. Like the early days of the personal computer, users are independently purchasing BlackBerry devices, smart phones, and other devices and looking to their companies to integrate them into the corporate network. Companies must apply traditional provisioning and inventory methods to the converged network to be successful.

Successful execution of a consumption management strategy is challenging due to the complexity of telecom and IT data and billing information. Where traditional telecom bills capture much of the information needs for TEM analysis, IT systems have not provided that degree of detail.

Organizations should avoid the phenomenon familiar to those experienced in previous technological transformations. Unintended and unanticipated developments can drain the benefits away, frustrating users and impacting budgets as they occur. Consumption management, using the strong foundation that traditional TEM provides, greatly reduces the chances of unwanted developments and uncontrolled usage of emerging converged networks. Amid the disruption of any technology shift is the opportunity to correct past mistakes and implement what is new in the right way from the very outset.

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About MBG

MBG (www.mbg-inc.com) is a leading Application Service Provider (ASP) that develops Web-based telecommunication and IT management solutions for Fortune 500 companies. Founded in 1990, MBG's solutions are focused on giving large organizations the ability to manage, monitor, and order all of their telecommunications and IT services through a secure, centralized hub. MBG's core solutions include provisioning, IT and telecom inventory, invoice processing, and chargeback, which combine to provide a complete end-to-end solution for our clients to satisfy core processes. Headquartered in New York, today MBG serves some of the largest multi-national corporations, processing more that $2 billion worth of telecommunications and IT charges.

To review a consumption management strategy for your organization in the context of a telecommunications expense management solution, contact Andrew Notaro at (212) 822-4437 or via e-mail Andrew.Notaro@mbg-inc.com.