

A Vision for the Future of TEM



Telecom Expense Management
Industry Association

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Telcom Danmark A/S

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The Current State of the TEM Market

The current state of the Telecom Expense Management (TEM) and Wireless Expense Management (WEM) market is vibrant and better than ever. This is true because TEM Solution Providers have adapted to client needs and TEM offerings encompass far more than just bill auditing and invoice processing. In fact, many TEM Solutions Providers feel that the TEM acronym fails to reflect the full range of capabilities that they offer today and their future vision of the industry.

TEM helps IT organizations analyze how technology investments contribute to the top line and control the bottom line. TEM is now growing to include a set of best practice principles that extend far beyond telecommunications. The new vision for TEM reflects a proactive best practice framework in which analytics and business intelligence help drive value.

TEM Origins

To understand TEM, it is necessary to know its history. Until 1984, AT&T owned and operated most of America's telephone network. Customers were dealing with one company that had a monopoly. It determined the services and equipment customers could use and the prices they would pay. This arrangement may not have been ideal for customers, but it was simpler.

In 1984, the settlement of a federal government anti-trust suit, led to AT&T's divestiture of its local telephone system and split into seven independent Regional Bell Operating Companies (RBOCs) or Baby Bells. AT&T kept its long distance network and its business telephone system service. MCI, Sprint and other firms began offering competitive long distance services.

Similar break-ups of state owned telecom carriers coupled with privatization and deregulation efforts occurred in many countries. Billing overcharges provided one indication that AT&T and other carriers were facing challenges adapting to the new competitive environment.

Why TEM?

Over the next ten to fifteen years, many enterprises hired telecom auditors to review billing and secure refunds for overcharges. In the mid-1990s, three main factors led to the transition from bill auditors to a TEM market. First, clients wanted more proactive solutions. Second, bill auditors needed a better more stable business model and customers needed help managing the proliferation of telecom service providers offering new services with a wide range of pricing.

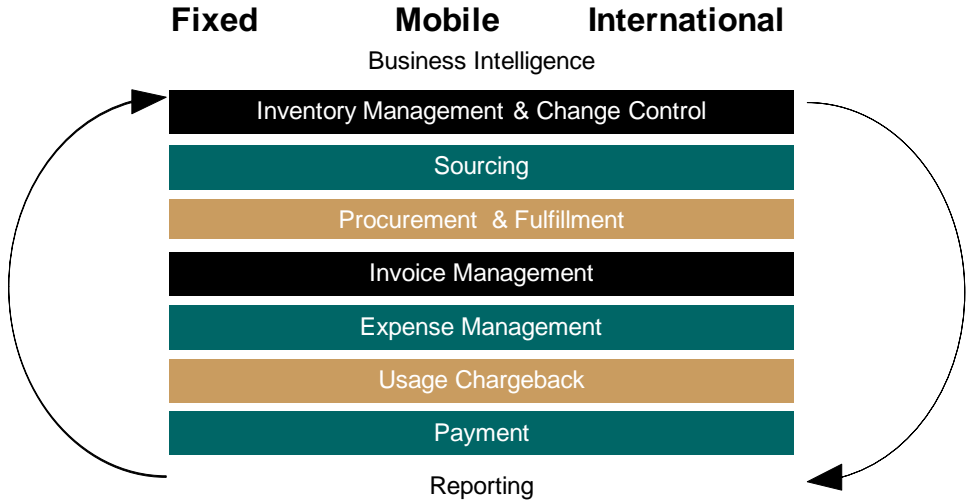
The first factor that led to TEM was that customers did not like the reactive approach of finding billing errors that accumulated over several months. They wanted to identify billing errors in the first month and get to the root causes of errors in an effort to eliminate them. The second factor, which led to TEM, was the search by telecom bill auditors for a better business model. It was difficult for these bill audit firms to create large companies with a diversified revenue stream from audit work. After the audit was complete, there were no other services to sell customers or recurring revenue.

The third factor driving the market evolution from bill audit to TEM was that managing telecom expenses had grown to be more complex. Enterprises had to adapt from dealing with one supplier for telecom services to many (in some cases hundreds) of different suppliers. The proliferation of service providers and new communications services made telecommunications expenses more complex and difficult to manage.

TEM Emerges in 2002

Starting in 1996, many bill auditors were adding new services to address the management of telecom expenses. By the end of 2002, the use of the TEM acronym was widely adopted by firms seeking to distinguish themselves from firms that only offered bill auditing. TEM programs now offer software and professional services to address the full lifecycle of telecom expenses. They focus on eight major domains: inventory management and change control, sourcing, procurement and fulfillment, invoice management, expense management (including validation and optimization), usage chargeback, bill payment, and reporting which provides business intelligence outlined in the diagram below.

What is TEM?



Market participants may have different names for the domains. Areas of emphasis for TEM programs also vary from management of fixed, mobile, and international services, but the eight major domains apply to the three types of telecom bills. Some enterprises have a single TEM Solutions Provider perform all of these functions while others use specialists for particular areas, but regardless of which approach an enterprise selects, an effective TEM program transitions decentralized processes into a unified approach.

TEM Adapts to Meet Client Needs

The fact that Wireless Expense Management (WEM) is the fastest growing part of the business shows how TEM Solution Providers have adapted to meet new client needs. This change is a reflection of the reinvention of telecom carriers from providers of fixed services to wireless services.

In its 2011 annual report, Vodafone, the largest telecom carrier, states, “the mobile industry generates approximately US \$900 billion of annual revenue and accounts for 1.5% of world GDP... Mobile services account for around 60% of telecommunications revenue. The mobile proportion of voice calls has increased over the last five years and now accounts for 82% of all calls made. Within mobile, the majority of income comes from voice calls in mature markets such as Europe. However, the fastest growing revenue segment is data services such as access to the internet through laptops, tablets and smartphones.”

AT&T's reports that its wireless segment accounted for approximately 67% of total income and 47% of AT&T's total operating revenues. AT&T's 2010 annual report also shows that its wireless data revenue increased more than 28.7 percent, which comes after a 33 percent gain to \$14.1 billion in 2009. Verizon reported similar results with a 22% increase in its revenue from its wireless business and 25.6% growth in wireless data to \$19.6 billion for 2010 after a 31 percent growth in wireless data revenue for 2009.

Telefónica, the world's fifth largest operator, states in its 2010 annual report that its top two areas for growth were “mainly from increases in mobile broadband (63.9%); in mobile telephony (+8.9%).”

A Vision for the Future of TEM

TEM engagements vary considerably from one client to the next, because clients have different needs and TEM Solution Providers are not all the same. Firms that succeed in this competitive market continue to innovate as they deliver solutions and gain the trust of clients. The market is large enough to have many successful firms that offer software and professional services to manage telecom expenses. These firms include smaller nimble firms, larger more established players, telecom carriers, systems integrators, and other providers. The TEM market is poised to grow for years to come as many different market participants enter the marketplace.

In an industry, that serves constantly evolving technology and service offerings, the center of many businesses now exists at the network edge. Increasingly the device is useless without the network. The network's primary purpose is to manage the connection of devices. This applies to any type of network, not just voice services. TEM solutions allow organizations to track and optimize employees' use of devices that connect to the network and effectively manage network utilization. The challenge of persistent and automated cost optimization in this new world is critical to every enterprise.

Convergence of IT and telecommunications has led to the integration of TEM with IT. TEM helps organizations run their telecom network as a business, and all of IT like a business by tracking the ownership and utilization of all their network assets. TEM helps IT organizations analyze and benchmark how their technology investments are contributing to the top line and controlling the bottom line. The future vision for TEM calls for Solutions Providers to offer best practices that extend beyond telecommunications. Many organizations are leveraging TEM solutions and applying TEM principles to improve management of other areas of technology.

This new vision for TEM reflects a proactive best practice framework in which analytics, performance benchmarking and business intelligence drive value. As long as network and network-related expenses remain among the top five expense items on the profit and loss statement, and the percentage of revenue coming across the network versus a cash register drawer continues to grow, TEM will remain central to the profitability and success of the enterprise. These developments show promise for an industry that is attracting new customers and selling more services and functionality to its existing clients. The TEM market supports many successful firms with growing revenue. Analysts, TEM Solution Providers, and enterprises confirm that this vibrant market is growing to meet client needs.

About TEMIA

The largest Telecom Expense Management (TEM) service providers founded TEMIA, the Telecom Expense Management Industry Association, in 2006. TEMIA has grown to 38 members with several international TEM suppliers with corporate headquarters overseas that manage over \$36 billion of telecom and data spend.

TEMIA's mission is to raise awareness and knowledge of the values and benefits of TEM solutions, to improve the quality and value of TEM solutions through the development and promotion of open industry standards, and industry knowledge among TEM providers, business partners, telecom service providers, and enterprise clients.

To learn more information about TEMIA, visit, <http://www.temia.org>.

About Telcom Danmark A/S

For the past 12 years, [Telcom Danmark](#) has provided services within telecom analyses and negotiations with data and telecom providers involving amounts totalling more than DKK 1bn. The point of departure for the work performed has always been to provide a total disclosure of the data and telecom connections involved, the accumulated traffic related to these, and of the activities having generated this traffic and the ensuing costs.

The exact and detailed analysis has been standardised; and today it can be prepared without actual involvement of the clients' internal resources as all the necessary and valid information will be obtained via specialised powers of attorney.

Taking our point of departure in this analysis, the financial consequences and other advantages associated with a change of provider or technology will be accurately simulated.

As the only Danish company, Telcom Danmark is a member of the global organization TEMIA (Telecom Expense Management Industry Association); and, likewise, we are the only Danish company to provide an IT-based system that has been targeted at businesses having more than 1000 mobile phones and annual costs of above DKK 10m.