

Market Guide for Telecom Expense Management Services

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Optimizing costs and managing efficiencies within dispersed IT and communications estates challenge enterprises. Sourcing, procurement and vendor management leaders should evaluate TEM vendors for a cost-efficient solution to support communications services, sourcing and strategy selection.

Key Findings

- Large multinational corporations (MNCs) with more than \$1 billion in revenue and complex telecom expense management (TEM) needs represent almost two-thirds (62%) of Gartner's TEM-based end-user inquiries.
- According to a Gartner end-user survey, enterprises are utilizing TEM to take control of cloud, mobile, wireline TEM and emerging Internet of Things (IoT)/machine-to-machine (M2M) inventory and costs.
- Enterprises are increasingly seeking to enhance tools and processes as a key benefit to TEM; yet, they face challenges associated with poor process definition and an incomplete governance model. This has led to some dissatisfaction with lengthened lead times and hidden costs.

Recommendations

Sourcing, procurement and vendor management leaders who execute on their IT services and solutions strategy and selection to identify TEM vendors should:

- Evaluate TEM vendors on their ability to drive process efficiency, performance and cost optimization across all communications-related IT. This should include local delivery and support where there is a complex service mix or limited internal control of the telecom estate.
- Assess the TEM platform's ability to scale beyond traditional fixed and mobile TEM by reviewing its capabilities for reporting, inventory management and integration. Verify that scaling automation does not come at the cost of reduced service delivery.



Mitigate deployment challenges by identifying the roles and responsibilities in a governance model covered in the contract and defining implementation schedules and scalability of services for different geographic regions, in addition to any partners the vendors use.

Market Definition

TEM services enable enterprises' IT, procurement and finance departments to order, provision, support and manage costs of large-scale corporate communications, associated IT services and their inventories (such as fixed and mobile telephony and data, cloud license tracking, and IoT connectivity). TEM services also include business intelligence (BI) and reporting suitable for supporting C-level strategic decision making. Gartner's TEM coverage focuses on SaaS-based applications/platforms, managed services and associated professional services.

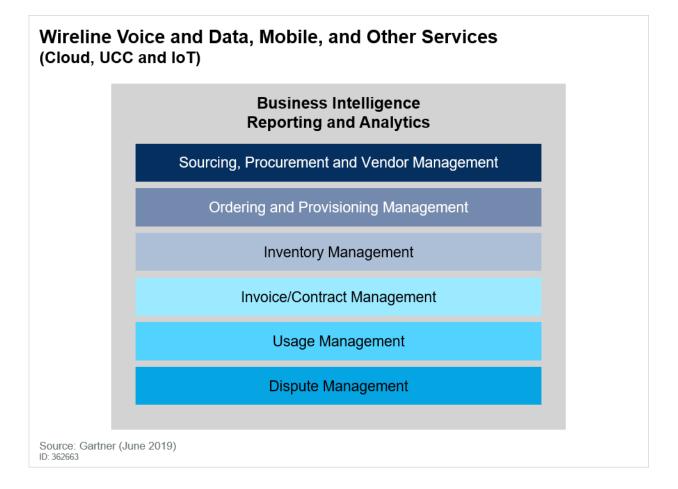
Market Description

TEM is a specific, but challenging function within IT and cost management. TEM providers are evolving their offerings as enterprises' ranges of fixed (voice and data) and mobile devices grow and incorporate other services and communications-related asset tracking. These offerings include inventory tracking of cloud/consumption-based services; other IT-related services, such as unified communications and collaboration (UCC); voice over Internet Protocol (VoIP); and IoT expense management as enterprises embrace digitalization.

Enterprises are seeking to better manage this complexity and its associated costs, and consider third-party TEM providers to be the most cost-effective way to secure needed program management capabilities. Therefore, enterprises look to TEM providers with the capability areas illustrated in Figure 1. (For detailed definitions, see Note 1.)



Figure 1. The TEM Stack



Market Direction

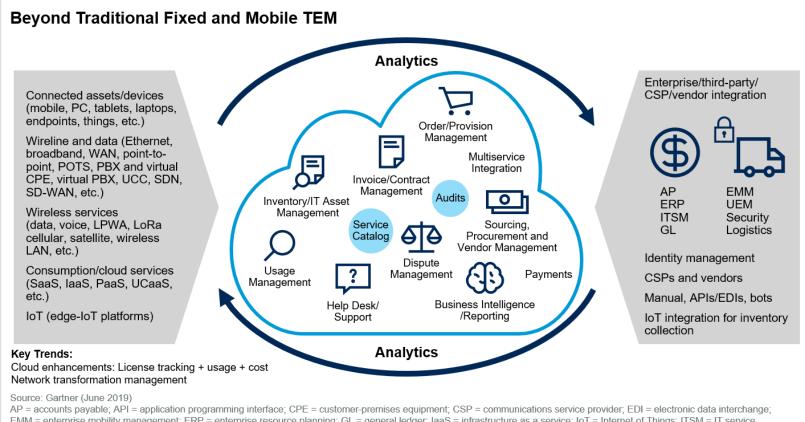
Enterprise communications and IT services continue to grow and evolve, driven by the use of video, cloud services, mobility, emerging IoT, consumption-based services and digitalization. Enterprises also evaluate TEM for traditional fixed and mobile tracking capabilities (such as fixed/wireline voice, call accounting, data networks, mobile voice and data services), and beyond.

Enterprises are looking to include a wider spectrum of communications-related IT and cloud-based tracking capabilities, along with full life cycle management of fixed and mobile assets, expenses and usage, and elements of IoT connectivity management (see Figure 2). The power of data and analytics for control purposes will continue to increase in importance, along with service delivery.

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Figure 2. Telecom Expense Management Expansion



EMM = enterprise mobility management; ERP = enterprise resource planning; GL = general ledger; IaaS = infrastructure as a service; IoT = Internet of Things; ITSM = ITS ervice management; LAN = local-area network; LoRa = long-range; LPWA = low-power wide-area; PaaS = platform as a service; PBX = private branch exchange; POTS = plain old telephone system; SaaS = software as a service; SDN = software-defined network; TEM = telecom expense management; UCaaS = unified communications as a service; UCC = unified communications and collaboration; UEM = unified endpoint management; WAN = wide-area network

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Some key trends in TEM:

- Enterprises are moving toward fully managed and outsourced TEM services delivered with cloud-based TEM applications. This is driven by digitization trends placing greater pressure on enterprise resources and governance to control budgets and services associated with managing communications, cloud-based applications and infrastructure, and emerging IoT services. Although many organizations manage their IT and telecom estates internally, complexity is rising, therefore challenging internal enterprise entities to control costs efficiently.
- Enterprises are showing exploratory interest in vendors' ability to track services, costs and inventories associated with UCaaS, IaaS, PaaS, storage, IoT and other IT assets, in addition to fixed and mobile, from a single platform. Several vendors such as Cass Information Systems and MDSL are deepening their cloud capabilities. This is a key trend because vendors can provide detailed information on usage and costs on next-generation services, such as IaaS and PaaS, in addition to tracking SaaS licenses, applications or redeployments.

SD-WAN usage is also increasing tracking and management requirements for enterprises, leading to further complexity. Sakon, for example, has enhanced its network transformation management capabilities.

- Advanced data analytics and intelligence from TEM systems is being used to make top-down and bottom-up decisions by context (for example, role, sites, location, business units) for spending, inventory and usage in easy, single-view and multidimensional formats. Deeper analytical capabilities including cost predictability and improved user experience are expected from platforms to generate more detailed analytics. The outcome of these analytics is used for tactical and strategic business decisions for communications and associated IT investments, budgets, inventory, future service provider contract negotiations, and to enhance processes within different contexts.
- Vendors (Asignet, Tangoe and MDSL, among others) continue their investments in platform automation to optimize TEM platforms' performance in complex environments in the form of robotic process automation (RPA). Enhancements continue for automated invoices, workflow links, vendor integration, inventory count and data processing in cases where standardized APIs or other methods aren't available and manual efforts are too slow and can't be scaled. More cognitive artificial intelligence (AI) abilities will be added as AI and advanced data requirements evolve.

Enterprises should ensure that highly automated platforms have assurance metrics in place for error testing to verify accuracy and correction in the event of faults and ensure SLA metrics are satisfactory around service delivery. Automation needs to enhance service delivery, not reduce it.

Preintegrated capabilities with leading ITSM, GL, AP, ERP and EMM systems using APIs should be expected. This will enable seamless workflows and data flow; internal chargeback allocations; and inventory classification by user, person, estate or even individual. MobiChord has gone one step further and sits within the ServiceNow platform.

Market Analysis

The TEM market is mature and commoditized. Many large/multinational enterprises that Gartner speaks to are on their second or third TEM engagement. Differentiation between vendors can be limited on basic or traditional fixed and mobile offerings, which can lead to pure price competition in many of the RFPs Gartner reviews. There is differentiation on service delivery capabilities and geographic reach/location. Tracking capabilities in newer services, such as cloud, are areas of growing differentiation. Enterprises should choose a TEM provider that suits their geographic and technology scaling needs over the intended contract period.

Large domestic, regional and multinational enterprises are investing in TEM services. Many enterprises struggle to rein in their telecom service and public cloud service spend. These areas globally represent 13% (over \$486 billion year-end 2018) and 5% (or \$198 billion in 2018), respectively, of global IT spend (\$3,650 billion).

Gartner's managed services survey of 430 enterprises in the second half of 2018 generated 271 responses on TEM (see "Market Insight: How Tech CEOs Can Leverage Enterprise TEM Challenges and Benefits to Drive Customer Acquisition"). Respondents indicated that the main benefits that TEM provides include improving business process outcomes, getting better visibility and control of assets, ensuring asset performance, and extending geographic reach or scale. Organizations aim to have clarity around costs and consumption for efficiency and optimization. By employing a TEM vendor, enterprises aim to save on internal resources while obtaining this overall view.

However, when sourcing a TEM vendor, differences in cultural and IT/telecom procurement structures can lead to longer transition times, lower than expected total cost of ownership (TCO) reductions and hidden costs.

To reduce deployment challenges, enterprises should define roles and responsibilities on each side (internal to the organization and externally with the vendor) through a governance model covered in the contract. They should also clarify implementation schedules and the vendor's ability to provide services needed in additional regions/locations and across different technology sets (as required). Enterprises should tie these into SLAs with target metrics (see "Toolkit: Telecom Expense Management RFP Template"). This will provide an understanding of how the vendor can drive efficiencies at scale and in complex landscapes.

Enterprise Requirements Vary by Size and Scope

Almost two-thirds of Gartner's end-user inquiries associated with TEM in 2018 come from large MNCs or large enterprises with more than \$1 billion in revenue. Both of these groups typically have complex national and international expense management requirements.

For enterprises with international requirements, it is common for TEM providers to partner with other providers to cover a technical requirement or to complement geographic reach. During 2018, there were some acquisitions to accomplish this (see Note 2). Still, the competitive landscape remains fragmented.

Interest in TEM continues to increase from midsize enterprises, which are looking to control costs and usage, and enhance processes around their growing number of consumption-based services

and mobile services/devices. Companies such as One Source Communications, Tellennium and smaller country-specific vendors play in this space. Note 3 provides examples of smaller TEM providers, mobile-only TEM providers, system integrators and IT outsourcers (ITOs) active in TEM.

Evolution of Procurement Practices – Managed Services Dominate

Enterprises can choose their TEM consumption model from several options, ranging from basic SaaS bundles/services to fully managed TEM with additional business process outsourcing (BPO) engagements as required. Other options include bundled or modular service selection and self-service.

While most TEM services tend to be a managed solution, some enterprises want to control the processes internally with the use of a self-managed platform. However, Gartner has observed frustration on the customer side when invoice loading and inventory have proven to be challenging, resulting in enterprises shifting to fully managed services to ease internal burdens.

Deeper Tracking Capabilities From Inventory, Service and Optimization

While fixed and mobile TEM is a foundational TEM offer, TEM service offerings are widening to encompass more features incorporating life cycle management, managed mobile services (MMS) integration or homegrown/acquired capabilities for IoT, UC and other IT asset modules. UEM/EMM and ITSM integration are common. SaaS license tracking and optimization are also common as risks and concerns about SaaS and IaaS growth require greater control and tracking in enterprises. Some vendors such as Cass and MDSL have deepened their consumption-based capabilities into IaaS and PaaS expense management to incorporate usage management and optimization.

Gartner increasingly observes enterprises seeking a holistic solution covering these areas in one place. AP and HR integrations are typically done via big ERP platforms (such as SAP), but where necessary, vendors can offer more customizable AP/HR integrations. Client inquiries also have increased for network transformation requirements with front-end consultancy along with TEM. Enterprises are showing greater interest in project management assistance associated with life cycle processes and optimizations for services such as SD-WAN.

Factors Influencing TEM Vendor Selection

Several factors influence TEM vendor selection. These are some of the more prevalent ones:

- Price/contracts Pricing is typically set by tiers as a percentage of overall annual spend or price per device per month. Competitive bidding situations have brought pricing down, especially in more significantly sized deals.
- Savings guarantees are being requested occasionally from new TEM clients (that have not had TEM engagements in the past), less so than for end-user enterprises that are in their second or third TEM engagement. In new TEM engagements, clauses in the contract have been negotiated to guarantee that the minimum amount of savings should equal the cost of the service. These contracts include exit conditions if those savings are not achieved each year and the difference does not go back to the client. Not all vendors support this requirement.

- Expected performance, SLAs and delivery capabilities More RFPs include requirements to meet defined SLAs. SLAs are an important part of TEM engagements, especially to support improvement over time. Gartner's "Toolkit: Telecom Expense Management RFP Template" includes SLA suggestions that are commonly addressed in RFPs. The quality of the RFP response and flexibility in negotiation is important and should include performance-related exits if SLAs aren't met.
- Relevant scalability for both technical and geographic requirements are necessary. It is important to rightsize and obtain the services required (and any additional services that may be put under management within the contract duration).
- Prior experience, whether it has been positive or not, is considered during vendor selection. This experience should include experience not only in a particular country but also with particular carriers and partners in that country to meet geographic and technical requirements.
- Service delivery Examine the availability of the vendor's local resources and professional service delivery teams to determine the vendor's ability to serve and scale according to enterprise requirements. This is crucial. For this reason, we see shifts toward managed services with professional service capabilities, despite many core TEM functions being automated through the platform.
- Continued platform evolutions and conformity to technical standards, data privacy compliance (such as the General Data Protection Regulation [GPDR]) and cybersecurity must be considered.
- Merger and acquisition (M&A) activity impact There is some uncertainty regarding roadmaps and long-term plans associated with platforms' integration through M&A activity and whether vendor consolidations will impact day-to-day services.

During 2018 and into 2019, buying cycles for TEM have lengthened, typically from an average of around six to nine months, to nine to 12 months. Part of this has been associated with cybersecurity and GDPR requirements, especially in international deals, extending decision-making times and slowing down implementation.

Enterprises should start the buying process earlier in the contract life cycle to prevent being forced into month-by-month contracts with existing vendors. The average contract term remains about 36 months with a 12-month break/renegotiation clause. Some vendors provide month-by-month contracts, but this is atypical in the market.

In very complex environments, some clients demand a try-and-buy model. This includes an initial audit in a contingency fee model covering a portion of the initial scope and then moved to a three-year standard TEM contract when clients are satisfied with the outcome.

Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.



Market Introduction

Readers should consider all applicable candidate vendors that interest them. The vendors reviewed are those most frequently asked about in Gartner end-user inquiries, typically serving the large, regional or MNC enterprise base.

Gartner has separated TEM vendors into those that can provide coverage globally, that is, in three regions or more (see Table 1), and those that are more regional (see Table 2). Attributes of TEM providers profiled are shown in Note 4. Note 3 provides some additional examples of TEM providers.

In addition to the TEM providers included in this report, system integrators (SIs), outsourcers and business management firms provide TEM services. These providers typically partner with TEM vendors to provide deeper-dive consulting and integration capabilities on extremely complex deals or white-label TEM platforms as part of larger system integration deals.

Also, communications service providers (CSPs) such as BT, Orange, Vodafone Group, AT&T and Telefónica are active through partnering and white-labeling, typically providing the ongoing ordering function. Mobile-only TEM vendors, MMS providers and network aggregators are also active in this market.

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Table 1. Representative TEM Pure-Play Vendors for Global Delivery

Vendor	Product, Service or Solution Name	Main Geo- graphic Coverage	Total Spend and/or Devices Under Manage- ment	Typical Enterprise Size or Telecom Spend/Device Count Under Management	Fixed	Mo- bile	юТ	SaaS	laaS	Other
Asignet	Wayfast Telcom & IT Lifecyle Manage- ment	Global	\$4.7 billion and over 150,000 mo- bile devices	Midsize to large MNCs. From \$4 million to \$500 mil- lion in annual spend; and/or from 2,000 to 100,000 devi- ces	Y	Y	Y	Y	Y	RPA-driven SaaS, cloud and IT assets — full life cycle
Calero Software	Calero Sol- ution	North Amer- ica, Europe, Middle East reaching over 50 countries globally	\$10 billion and over 1,000,000 mobile devices	North America and EMEA midsize and large, regional and MNC enterprises from \$5 million to more than \$500 million in annual spend; or 1,000 to hundreds of thou- sands of devices	Y	Y	Y	Y	Y	MMS, IT expense management, UCC analysis, IoT device tracking, cloud infra- structure services and usage-based services
Cass In- formation Systems	ExpenseS- mart	North Amer- ica, Europe, Asia/Pacific and Latin America	\$60 billion, and 1.1 million corpo- rate-owned and 350,000 individu- ally owned devi- ces	Large enterprises and MNCs with annual spend from \$5 million to \$200 million, or more than 1,000 devices	Y	Y	Y	Y	Υ	PaaS, MMS (including BYOD), managed sourcing services, fully managed global net- work service provision- ing, SD-WAN migration and implementation, global bill payment
Dimension Data	NexTEM	Global	Over \$1.8 billion and more than 600,000 devices	Large regional and multina- tional enterprises from \$10 million in annual spend to hundreds of millions	Y	Y	Y	Y		Collaboration analytics services, MMS, IoT life cycle management
MDSL	Vision and Connect	Global — over 100 countries	\$12 billion and 1.8 million devices	Large global enterprises and MNCs. Annual spend of \$5 million or more with domes- tic U.S., European and inter-	Y	Y	Y	Y	Y	MMS, EMM adminis- tration, PaaS, fintech license tracking and other IT-related recur-

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Vendor	Product, Service or Solution Name	Main Geo- graphic Coverage	Total Spend and/or Devices Under Manage- ment	Typical Enterprise Size or Telecom Spend/Device Count Under Management	Fixed	Mo- bile	ΙοΤ	SaaS	laaS	Other
				national needs; or over 1,000 mobile devices						ring spend through the system
Sakon	Sakon	Globally in 75 countries	Over \$6 billion and 650,000 devices	Large national and multina- tional enterprises from \$10 million to \$500 million in tel- ecom spend; and from 5,000 to 400,000 devices	Y	Y	Y	Y		MMS (including BYOD) including a self-service mobile app, MDaaS, network services, transformational projects
Tangoe	Tangoe Platform Tangoe Fixed Tangoe Mobile Tangoe Cloud	Global	\$40 billion and 10 million devices	Large North America and EU regional companies and MNCs with annual spend from \$1 million to over \$750 million; also from 1,000 devi- ces	Y	Y	Y	Y	Y	MMS, IT assets such as wearables, IoT devi- ces, sensors, LPWAN, SD-WAN, SaaS, PaaS, IaaS

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Source: Gartner (June 2019)



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Table 2. Representative TEM Pure-Play Vendors for Regional Delivery

Vendor	Product, Service or Solution Name	Main Geo- graphic Coverage	Total Spend and/or Devices Under Man- agement	Typical Enterprise Size or Telecom Spend/ Device Count Under Management	Fixed	Mobile	IoT/M2 M	SaaS	laaS	Other
Bruin	Bruin	North America	\$1 billion in spend and more than 500,000 devi- ces/lines	Midsize to large North American enterprises, government agencies and U.Sbased MNCs, ex- panding internationally with annual spend from \$250,000 up to hundreds of millions; and from 300 devices upward per month	Y	Y	Y	Y	Y	Network monitoring, SD-WAN integration, UCaaS and switch in- tegration, utilities, fleet management, telehealth, and other IT asset tracking
Cimpl	Cimpl	North America	CDN\$3.75 bil- lion in IT and telecom spend; 9 million assets and services managed	Medium to large North American and regional companies, from CDN\$2 million (approximately US \$1.5 million) to over CDN \$100 million (approxi- mately US\$75 million)	Y	Y	Y	Y	Y	PaaS, cloud storage, CRM, UCC licensing, IT spend. Other IT as- sets such as desk- tops, hardware main- tenance and support, monitors, print and scanning, thin clients, etc.
Globys	Globys platform	Europe and North America	\$200 million bil- lion, and 330,000 to 340,000 devi- ces	Large national, European and North American re- gional enterprises and MNCs with up to €50 mil- lion under management	Y	Y		Y		Carrier B2B portals, other IT assets
ICOMM	Telecom Manage- ment Ap- plication (TMA)	North America	\$250 million and 100,000 devices	North American large and MNC enterprises with an- nual spend from \$10 mil- lion to \$30 million to \$250 million; or 500 to over 50,000 devices	Y	Y	Y	Y	Y	MMS, SD-WAN, UCaaS and consult- ing services

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Vendor	Product, Service or Solution Name	Main Geo- graphic Coverage	Total Spend and/or Devices Under Man- agement	Typical Enterprise Size or Telecom Spend/ Device Count Under Management	Fixed	Mobile	IoT/M2 M	SaaS	laaS	Other
MobiChord	MobiChord	North America and Europe	\$360 million in spend and 510,000 mobile devices	Medium and large U.S and Europe-based com- panies with an annual spend above \$5 million or at least 5,000 devices	Y	Υ	Y	Y	Y	MMS, Google, AWS and Azure SaaS li- cense tracking and expense manage- ment. Any IT tracking, but specializes in in- tegrating UEM solu- tions with ServiceNow
Network Control	TemNet	North America	\$734 million and a total of 225,000 devi- ces	Large North American en- terprises with annual spend from \$2 million to \$50 million or 1,000 devi- ces (mobile, personal hot spot and tablets)	Y	Υ	Y	Y	Y	Other IT asset types, personal hotspots, UC, all data center services and perform optimization studies. AWS/Azure bill pro- cessing, optimization and recommenda- tions
One Source Communi- cations	Communi- cations Lifecycle Manage- ment (CLM) Managed Mobility Services (MMS)	North America	Over \$700 mil- lion and more than 1 million assets and de- vices under management	Medium and large North American enterprises with annual spend from \$100,000 to \$25 million; and from 500 to 40,000 devices	Y	Y	Y	Y	Y	IT services life cycle management capabil- ities (office as a serv- ice) focusing on laaS, SaaS, UCaaS and disaster recovery, along with managed security services and service assurance in the form of NOC or SOC and field serv- ices
Radius- Point	Expense- Logic	North America, Europe	\$550 million; more than 45,000 devices	Medium to large regional and North America-based MNCs with small Europe-	Y	Y		Y		IT asset management (portal for end-user tracking and ordering

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Vendor	Product, Service or Solution Name	Main Geo- graphic Coverage	Total Spend and/or Devices Under Man- agement	Typical Enterprise Size or Telecom Spend/ Device Count Under Management	Fixed	Mobile	loT/M2 M	SaaS	laaS	Other
		(U.K., Spain, France and Germany)	and 45,000 lines and cir- cuits	an subsidiaries in the U.K., France, Spain or Germany						items such as desk phones, Cisco rout- ers, and leases through to end of life), SD-WAN, VoIP, smart meters from utilities
Tellennium	Tellennium Integrated Manage- ment Sys- tem (TIMS)	North America (U.S.)	\$215 million and 21,000 de- vices	Medium and large U.S based companies with an- nual spend of \$600,000 to \$40 million; and 500 to 10,000 mobile devices	Υ	Y	Y	Y		SD-WAN, MMS, con- sulting
TNX	j ³	Latin Amer- ica, Iberia	\$230 million, 518,000 devi- ces and 680,000 M2M services	Large panregional, Latin America-based MNCs and global companies with strong presence in Latin America. Annual spend of \$1 million to more than \$100 million; and more than 1,000 devi- ces	Y	Y	Y	Y	Y	IT hardware, printing services, service cen- ter, call center, service desk, cost and asset management, laaS tracking and invoice management
Valicom	Clearview	North America	\$750 million and 25,000 de- vices	Medium and large U.S based companies with an- nual spend of \$500,000 to more than \$70 million; with a minimum of 500 mobile devices	Y	Y	Y	Y		IT asset management and software tracking management

Note: Total spend relates to the total spend (wireline, wireless and other items) under management. Devices refer to mobile devices or other assets (such as tablets, smartphones or any other explicitly mentioned).

AWS = Amazon Web Services; NOC = network operations center; SOC = security operations center

Source: Gartner (June 2019)



Vendor Profiles

Global Vendors

Asignet

New Jersey, U.S.-based Asignet is a managed service TEM/MMS/ITAM provider with offices in Latin America and Spain. Asignet has 40 customers and 150 employees. Asignet provides life cycle management solutions addressing IT, fixed voice, data, mobile, SaaS licenses and cloud services (for AWS, Microsoft Azure, Skype and Office 365) using patented RPA technology through its Wayfast cloud platform with a service management wrap.

Asignet's RPA automated solution has 11 global patents. Core automated functions are invoice processing, inventory discovery and orchestration for provisioning. Asignet has integrated more than 800 SaaS/telecom portals into Wayfast. Asignet maps all data to its configuration management database (CMDB/inventory), from assets to invoices, and automates employee on-/off-boarding using RPA integration for inventory and change management accuracy. Wayfast is based completely in Microsoft's Power BI analytics and reporting platform.

Asignet offers TEM/MMS/ITAM as a self-service, fully managed/BPO solution and through partners internationally. Fully customizable, it provides BI and analytics, administration, and end-user portals, supported by its operational SaaS/portal operations centers in Uruguay and Mexico. Asignet provides invoice processing; contract, asset, order and usage management; audit and optimization; allocations and chargebacks; contract management; dispute recovery; enterprise integration; UCaaS integration; 24/7 help desk; security; and analytics.

Calero Software

Calero, owned by Riverside Partners, is a global provider of TEM, mobility and cloud management solutions, supporting over 3,000 enterprises. Customers include North American and EMEA-based enterprises, universities, government agencies and MNCs with operations spanning all global regions.

Its integrated TEM solutions range from SaaS to fully managed BPO engagements, with service programs encompassing multilingual support for managed mobility, expense management and usage management all within a unified platform.

Calero's offerings go beyond traditional TEM, leveraging its modular technology suite to solve the challenges of managing subscription-based software, extending to IoT device management, cloud, infrastructure and usage-based services.

Its solution, "Insight Analytics," has embedded BI, including advanced data visualization, and supports the analysis of expense, inventory, usage, ordering and financial management processes. It is a multidimensional, guided analytics platform for different role-based users and scenario planning, providing visibility and control of costs.

In 2018, Calero acquired U.S.-based ComView, Dutch-based A&B Groep and U.K.-based Veropath TEM providers to expand European capabilities and enhance customer service. The platforms have been integrated into one "Calero Solution" using shared services frameworks. Calero has 400 employees and is based out of Rochester, NY, U.S. with offices in the U.S., EMEA and the U.K.

Cass Information Systems

Cass (Nasdaq: CASS), founded in 1906, offers fully managed TEM services with its hosted platform (ExpenseSmart). It provides a broad range of expense management services for fixed and mobile (incorporating wider MMS and BYOD services) and standard integrations with third-party systems including single sign-on, ITSM, human resources information systems (HRIS), AP/GL and EMM.

Cass extends into other IT management areas including conferencing, print services, SaaS billing management, network provisioning and strategic sourcing. It has recently added IaaS and PaaS management solutions into ExpenseSmart to manage security, compliance, chargeback, budgeting and cost optimization for AWS and Azure, among others. It also offers an IoT/M2M solution extension for its mobile offering, focused on IoT inventory, provisioning, invoice processing, auditing and disputes. Cass also provides global invoice payment services through its subsidiary, Cass Commercial Bank.

Cass offers services in most regions directly or via partners. Cass has around 1,200 full-time employees based in the U.S., Europe, Singapore and Brazil. Cass also uses partner TNX in parts of Latin America. It has bidirectional partnerships with system integrators CompuCom and Acuative.

Cass manages \$60 billion of annual spend and processes over 245,000 invoices daily in over 90 countries. Cass is GDPR-compliant and Privacy Shield-certified.

Dimension Data

Japanese NTT-owned Dimension Data supports enterprises in large transaction-based projects using its global outsourcing and integration capabilities across engagements.

Dimension Data's Communication Lifecycle Management team has over 150 employees working closely with the wider company for service delivery, project management, support, additional managed services and help desk functions in regional sales. It offers invoice processing, usage management and dispute management.

Dimension Data also offers Collaboration Analytics Services, enabling enterprises to track which collaborative services are being used to pay for consumption-only. Currently, this service is available for conferencing, with units for mobile, voice and video, and messaging to be launched soon. It manages, optimizes and makes real-time recommendations based on analytical data for a spectrum of enterprise hybrid communications and IT needs for different stakeholders to make evidence-based decisions.

The data-center-based architecture handles microservices associated with TEM and CLM, with six CLM delivery centers allowing uniform delivery across hybrid communications and IT environments (fixed, mobile, UC, cloud and IoT). Dimension Data also supports 170 currencies.

Recommendations for optimizations are based on cost, service usage, business utilization and employee behaviors applied inside and outside the network edge and across the entire IT service portfolio.

MDSL

Sumeru Equity Partners backs MDSL, which serves more than 225 large regional, global enterprises and MNCs across all verticals with a strength in financial services, local and state governments, and large educational establishments. It has 422 employees and nine offices in Europe, North America and Asia/Pacific.

MDSL's complete TEM feature set focuses on managed mobility, fixed voice and data, call accounting, UCC, IT asset management, and IoT. In early 2019, MDSL introduced its cloud expense management solutions, beginning with AWS and Azure utilization reporting and allocation and additional optimizations. MDSL's roadmap includes other public cloud providers. MDSL has established solutions to manage SaaS inventory, expenses and compliance, leveraging its market data management offerings.

MDSL platforms Vision and Connect leverage a single database with centralized reporting to deliver the most appropriate client platform. Both can be delivered as SaaS, on-premises or hybrid, with global scale. The roadmap for each platform extends 10 years with feature parity.

MDSL offers global SLAs, multicurrency and multilingual capabilities with global 24-hour/365-day support. MDSL has bronze technology ServiceNow partner status. It has integrated more than 435 carriers for billing via API, eBonding and robotic invoice capture. Beyond traditional TEM, MDSL offers vendor quote management, self-service reporting, BI, procurement activity, compliance and self-certification capability.

Sakon

Headquartered in Concord, Massachusetts, U.S., privately owned Sakon has 500 employees, including a global delivery center in Pune, India. It provides control and insight for enterprise communications ecosystems through a SaaS-based platform, services and a self-service mobile app. Sakon has a strong implementation team and managed services to support more than 220 enterprises directly and indirectly through partners. Sakon is involved in transformational projects with CSPs, SIs and ITOs, such as IBM. Sakon underpins some vendors in Gartner's "Magic Quadrant for Managed Mobility Services, Global."

Sakon manages global communications inventory (wireline, network, wireless, IoT, SaaS), usage and cost optimization, sourcing, and supports network transformation. Its MDaaS and BYOD solutions enable enterprises to transition away from device ownership. The platform is composed of six applications (mobility and IoT, network services, cloud application management, expense management, sourcing, and transformation management) to automate processes and deliver efficiencies. It provides detailed inventory builds and maintenance where data is normalized, actionable and updated through the platform.

Sakon offers reporting and interactive dashboards to enable efficiency insights and reveal trends, abnormalities, SLA compliance and traffic-support metrics. Its open architecture streamlines third-party data and provider integrations (for cloud, mobility, wireline, leading ITSM, GL, AP and HR systems).

Tangoe

Tangoe is owned by Marlin Equity Partners and is based in Parsippany, NJ, U.S. Tangoe serves more than 1,500 enterprises globally with its TEM solutions and advisory and managed pay services. Tangoe provides one product — the Tangoe Platform — with three solutions — Tangoe Fixed, Tangoe Mobile and Tangoe Cloud. These solutions are delivered as SaaS-based or fully managed BPO solutions. Tangoe maintains all inventory; manages move, add, change or delete/ disconnect (MACD) functions; allocates and processes invoices; provides chargeback functionality; delivers reports on expenses and usage; and manages invoice payment. Tangoe Fixed provides inventory visibility (by user, location and business unit), workflow approvals, invoice control, expense identification (rate plan errors, zero-use/terminated lines) and resolution, expense optimization, and internal chargeback. It has global regulatory compliance. It also performs one-time and/or recurring audits.

The Tangoe Platform integrates with leading AP, GL and enterprise ERP systems, targeting procurement, IT and finance with end-user, manager and administrator visibility for Tangoe Fixed. Tangoe offers direct and indirect services through SIs, agents and service providers.

Tangoe Rivermine will be used as an exception in highly customized and complex deals. Former Tangoe Atlas and Asentinel names are no longer used. With 13 offices globally, Tangoe processes more than 1.5 million invoices in 45 currencies every month.

Regional Vendors

Bruin

Initially developed for technology solutions provider MetTel, Bruin independently launched its offering in 2018 after successful implementation for a large U.S. government federal agency and commercial enterprises.

Bruin offers midsize and large, complex North American-based enterprises and government agencies communications (wireline, wireless, IoT and IaaS); fully managed services for financial control; and operations for telecom services, including service optimization. Bruin has over 1,500 customers, of which 100 are MNCs. Bruin has more than 50 employees.

The automated platform provides actionable insights, automated trouble ticketing, bill processing and payment, synchronized provisioning, inventory management, and integrated approvals with smart routing. The platform offers role-based access; reporting and contract-driven, quote budgeting; rate registration; and user, location and contract management capabilities. Bruin's public APIs enable integration with SAP, ServiceNow, Atlassian (Jira Software) and Remedyforce, among others. Bruin enables full visibility into smartphones, landlines and software licenses for asset tracking and identification of misuse and anomalies. It is adding algorithms and AI to predict spend, and Bruin has deployed a web-based, tablet-friendly app for anytime, anywhere Bruin access. The platform provides detailed recommendations for simplifying telecom management, and it has added enhanced SD-WAN integration for real-time updates and availability on end customers' networks.

Cimpl

Montreal, Canada-based, privately owned Cimpl provides self- or fully managed TEM services on its inventory-based, single, SaaS multitenant platform. Cimpl goes beyond fixed and mobile TEM into UCC licensing, IT spend and M2M, covering hardware and services. For cloud services, Cimpl tracks licenses, cost and usage for services such as Skype for Business, Salesforce, SAP Concur and Cisco Webex, in addition to IaaS tracking.

Cimpl uses established partners in North America, including SIs/ITOs, carriers and smaller regional consultants. It is starting to have a global reach via its platform and partners.

Cimpl uses customer feedback to provide enhancements throughout the year. Cimpl provides ROI breakdowns, hard savings, process improvements through automation and inventory accuracy. The platform allocates asset and element costs by user-defined categories (for example, by employee, cost center and business unit). Connecting complex information allows user clarification of telecom and IT expenses, and links services to assets. An employee self-validation program enables accountability for assigned technology and its associated costs. A provider portal fulfills client service requests directly via role-based access control.

Cimpl is growing its preintegrated capabilities with CSPs, ITSM providers, mobile device management (MDM) vendors and IoT connectivity platform providers. It also provides business automation processes, policy enforcement and order fulfillment.

Globys

Netherlands-based Ezwim joined U.S.-based telecom portal company, Globys, in the fourth quarter of 2018. Globys has more than half a million business customers. It provides TEM directly and indirectly via partners — typically CSPs and ITOs. Globys' TEM service is focused on wireless, though it has a small portion of wireline expenses under management.

Globys emphasizes data privacy and protection. It supplements its carrier bill presentation, selfservice procurement, support and wireless expense management capabilities with a range of modular fixed expense management, BPO services, analytics, payment services, consulting, professional and integration services.

In addition to Europe and North America, Globys has a strong presence in the Middle East and Australia/New Zealand, applying follow-the-sun support capabilities. Globys' platform provides a variety of reports and has real-time tracking solutions for mobile voice and data usage. Data is organized by currency, country and business unit.

Globys' self-service portal supports workflow application and integration using ServiceNow and end-user, role-based ordering and MDM integration via Apple's Device Enrollment Program. Globys' user interface is part of its expense management suite, providing enterprises with a global view of transactional spend, usage, service, SLA management and simultaneous dashboard presentation. It allows local service escalations and spend forecasting templates for international rollouts.

ICOMM

ICOMM is a services-first telecom management and consulting company with 65 employees, offering IT and telecom support, fixed telephony, UCaaS and mobility support, contract/RFP management, network transformation consulting, and TEM. It serves around 100 enterprises. ICOMM uses a partner channel approach to market, and it is expanding its direct-to-market approach. With some of its channel partners, ICOMM is used for implementation and support.

ICOMM's TEM offering is inventory-centric and includes a hosted or cloud-based modular application called Telecom Management Application (TMA). TMA includes a service module with a detailed inventory with all communications-related services. It provides a site module for detailed telephony and networking inventory; an invoice validation processing module customized to a client's accounting system; and an interactions module for ordering and incident management. Real-time status and related reporting is available for all the modules.

ICOMM offers audit and dispute services and payment services, as well as vendor contract negotiation on top of its TMA tool. It provides help desk support. It also offers technical migration advice for cost reductions in the areas of telephony platform rollouts/migrations (VoIP and Session Initiation Protocol [SIP]), WAN conversions (Multiprotocol Label Switching [MPLS] to SDN), carrier migration, contact center and managed mobility capabilities.

MobiChord

Based in Salt Lake City, Utah, U.S., with customers in the U.S., Europe and Asia/Pacific, MobiChord provides TEM services across wireline, wireless, cloud and IoT environments, serving more than 70 medium and large U.S. and European companies. It has 120 employees.

MobiChord is expanding as a gold technology partner with ServiceNow and as a ServiceNow venture company. MobiChord's applications sit within the ServiceNow platform. Therefore, end-user enterprises benefit from ServiceNow's capabilities to digitize workflows, automate work and enable end-to-end self-service, rather than integrations within the ITSM platform.

MobiChord provides insights into assets, spend, consumption and services for end users and managers, with global dashboards and oversights for administrators. MobiChord's solutions work through ServiceNow workflows in an automated manner (with HR, AP and GL) to digitize organizational processes. Data from external service providers (MobiChord manages over 200), EMMs and inventories is centralized on ServiceNow where the complete life cycle and processes are managed. Change service requests and EMM actions can be performed directly within ServiceNow. Although MobiChord's solutions are based on the ServiceNow platform, enterprises don't have to be ServiceNow customers.

MobiChord offers flexible TEM propositions, allowing enterprises the choice of self-management, fully managed services by MobiChord or managed services provided by third-party partners.

Network Control

lowa, U.S.-based, Network Control provides a full life cycle managed TEM service for over 75 enterprises. Using its proprietary TemNet SaaS application, it touches most vertical markets. The company also has been expanding to provide global coverage. Network Control's TEM solutions are fully integrated, covering fixed, mobile, cloud and other IT asset types. Since 1998, Network Control provides short-term contracts to assure 100% client satisfaction.

Network Control's managed TEM software and functions have a strong focus on inventory management and incorporate contract management, procurement, order provisioning, invoice validation, audit processing, technical support, RFP, strategic planning, allocation and chargeback. It delivers monthly ongoing inventory analytics and savings reports that are measured against baselines for fixed and mobile TEM (including tablets and personal hot spots). Services extend into other billable items such as UC and cloud licenses. For mobile, Network Control offers wireless help desk support and optimization and kitting for wireless devices. The company proactively manages all points of the communications life cycle for the TEM engagement.

Network Control has a dedicated support team, offering seamless integration into business processes (GL, HR, accounts payable and consultancy). With 80 professional resources, it has the highest employee-to-customer ratio and many long-standing customer engagements.

One Source Communications

Based in Greenville, NC, U.S., privately owned One Source Communications offers fully managed Communications Lifecycle Management (CLM) and Managed Mobility Services (including IoT). Both of these services incorporate a SaaS-based TEM application where the company provides full onboarding, training, ongoing contract optimization and implementation.

One Source Communications enhanced its Managed IT Services, service support and delivery based on its 2017 and 2018 acquisitions (see Note 4). It has enhanced its Managed Security practices by partnering with FireEye and Cofense. The company also offers field services.

Typically serving midsize and large U.S. and North American enterprises, directly, One Source Communications has over 200 telecom experts and professional services employees. The company uses partners in a few out-of-region instances.

With an average customer tenure of 12 years, One Source Communications serves a growing base of more than 1,000 midsize and large U.S. enterprises, providing fully managed services from procurement to advance payment of technology/IT expenses. The company aims to simplify complex technology evolutions using end-to-end management, ongoing contract management, MACD support, sourcing, provisioning and 24/7 help desk support through its three U.S.-based, geographically redundant NOCs. It also offers cost recovery and dispute management with

dedicated resources that manage processes and provide recommendations for ongoing optimizations and enhancements.

RadiusPoint

Orlando, Florida, U.S.-based, privately owned RadiusPoint offers fixed (including SD-WAN and VoIP), mobile, SaaS application license tracking, billing, invoice processing, audit and optimization by location and ID level for IT, communications, software applications and devices, along with utilities.

RadiusPoint focuses on expense and contract management using its own help desk for fixed and mobile order fulfillment, Tier 1 and 2 support, kitting and testing. It uses partners for mobile device break/fix, recycling and afterhours support.

RadiusPoint has around 45 staff and focuses on midsize to large regional and North Americanbased MNC enterprises. Outside of North America, RadiusPoint has U.K. and Canadian entities and, when needed, it uses partners in Europe and elsewhere.

RadiusPoint offers life cycle and expense management via its single SaaS-based TEM portal "ExpenseLogic" as a self-managed DIY solution, fully-managed solution or as a BPO engagement. It has enhanced its drill-down basis in "site manager," added IT asset tracking functions using partner Iron Shield Networks and enhanced its cloud tracking capabilities. For mobile, individual data can be obtained via the end-user portal. A customized client portal facilitates orders and services by vendor integration or order placement.

The platform pools weekly reports that highlight credits and refunds, and it provides quarterly reporting containing verified savings and credits.

Tellennium

Tellennium, based in Louisville, Kentucky, U.S., has a heritage in communications life cycle management. The company focuses on fixed, SD-WAN and mobile TEM, using invoice processing from its SaaS-based Tellennium Integrated Management Solution (TIMS) platform and other communications management services. TIMS addresses the more automated requirements of processing, internal chargeback, allocation, inventory and validation. It is updated every four to six weeks with new features and enhancements.

Tellennium has approximately 40 employees, typically serving medium and large enterprises. The company sells directly, although it also has an indirect channel using value-added resellers that act as account management support (as required). With approximately 60 mostly U.S.-based customers, Tellennium impacts verticals in healthcare, hospitality, financial, manufacturing, professional services and energy.

Tellennium offers wireline and mobile expense management services, such as payment, invoice processing, inventory management, IoT management, audit, optimization, support and change management services. This includes other telecom management items associated with enterprisewide systems such as Mitel, Avaya, Cisco and Skype for Business.



The TIMS platform is configurable for almost any life cycle process need, including assets and utilities. While most enterprise customers engage Tellennium's fully managed offering, the TIMS platform can also be provided as a self-managed, SaaS-based application.

TNX

Santiago, Chile-based and privately owned TNX is a regional Latin American TEM company with its own platform. It has around 100 employees in Argentina, Brazil, Colombia, Chile, Mexico and Spain. It serves Latin America-based multinationals, panregional and large enterprises in over 25 countries (including in Australia, South Africa and North America).

TNX has a consultative approach to TEM, focusing on improving spend productivity, re-engineering internal processes (when required), including IT services, to implement TEM. Its i³ service uses information on the enterprise's internal environment or suppliers to get a monthly inventory, telecom resource and IT flow for optimization. TNX then identifies and quantifies continuously monitored improvement initiatives. TNX provides insight to capture anticipated benefits.

TNX's TEM service can be deployed as a fully managed solution across fixed and mobile environments (including MMS) or in a modular design for inventory, sourcing, procurement, dispute, invoice, usage management, reporting, BI and bill payment.

TNX can seamlessly integrate with other TEM partners to fulfill Latin American and Iberian parts of global contracts via its portal. TNX also audits inventory, usage and billing information in partner portals and provides last-mile services, such as collecting carrier credit notes, contract negotiation support and MMS.

Valicom

Valicom, based in Madison, Wisconsin, U.S., offers a comprehensive suite of telecom cost management capabilities covering the life cycle from RFP services to telecom contract negotiation, telecom audits, wireless and wireline optimization, and telecom invoice processing. It also provides invoice payment services. The 100% female-owned, vendor-independent company also provides IoT TEM and other IT asset management and software tracking services, adapting to serve each client's unique needs.

The Valicom platform, called Clearview, is a web-based telecom expense, invoice and inventory management software, which is updated frequently based on end-user feedback.

Valicom goes to market both directly and indirectly via its channel partner program. Clearview can be accessed through several models: Host & Load (a subscription with a monthly recurring charge), as a one-off telecom audit outsourcing project, as a hybrid with access to the platform plus professional services, or as fully outsourced BPO. The company also offers bill payment services. As of late 2018, new pricing options with shared savings were launched.

The company serves some 75 enterprises and midsize businesses with approximately 70 employees, dedicated project managers and channel partners.

Market Recommendations

Sourcing, procurement and vendor management leaders should:

- Evaluate TEM vendors for support with a complex mix of services. If you have limited control on the telecom estate, assess TEM vendors' ability to drive efficiency and optimization across related IT (wireline, wireless and cloud assets and services). Check vendor's capabilities by reviewing references from organizations with similar size, geographic spread and services mix for traditional and if required additional TEM services. Pilot the solution. Rightsize the provider to suit geographic and technology scaling needs.
- Examine the local capabilities of the vendor, either directly or through partnerships. Initially assess capabilities in the most important countries to be deployed. Require TEM vendors to acknowledge if they need to partner and identify those partners for the level of their involvement. Ask vendors to ensure service delivery, quality assurance and governance models are implemented for fully managed TEM, thereby ensuring partners and vendors meet local fulfillment needs and service levels.
- Review platform and automation capabilities for services beyond traditional fixed and mobile to meet requirements for reporting and inventory management detail. Ensure scaled automation is not done at the expense of service delivery. In so doing, quiz the vendor on assurance metrics for error testing and correction. Ensure SLA metrics around service delivery are satisfactory and include improvement over time.
- Minimize deployment challenges by clearly understanding what can be provided and where, by knowing the roles and responsibilities (internally in your organization and in the vendor) in a governance model included in the contract. In so doing, define implementation schedules for different services (as required) and for different regions. Use SLAs with targeted metrics. This will assist in understanding vendors' ability to drive efficiencies at scale and in complex landscapes.
- If you are changing your TEM vendor, ensure a vendor migration path is in place and that you understand privacy or security requirements by geography to prevent delays in new vendor migration. Enterprises will be forced into month-by-month contracts until all considerations have been sorted out.
- Perform due diligence on TEM vendors involved in M&A activity around their ability to maintain day-to-day activities, service delivery, future platform roadmaps, financial position and leadership. Enterprises should contractually protect themselves in the event of M&A activity.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Toolkit: Telecom Expense Management RFP Template"

"Magic Quadrant for Managed Mobility Services, Global"

"Critical Capabilities for Managed Mobility Services, Global"

"Market Insight: How Tech CEOs Can Leverage Enterprise TEM Challenges and Benefits to Drive Customer Acquisition"

"Market Insight: Drive Customer Acquisition by Focusing on Regional MMS Deployment Challenges and Benefits"

"Market Insight: Drive Customer Acquisition by Identifying Regional Enterprise MMS Strategic Needs and Challenges"

"Market Insight: Leverage Key Performance Indicators and Investment as Differentiators for MMS"

"Market Insight: Sourcing Trends for Managed M2M Services - A Cross-Industry View"

"How to Negotiate and Evaluate Telecom Expense Management Prices, North America"

Evidence

Gartner has a large number of TEM-related inquiries from end users focused on sourcing from vendors. Of the TEM-related inquiries from January 2018 through January 2019, approximately 65% were from end-user organizations. On several occasions, enterprises noted that using one company to perform central management of most of their IT assets would be useful.

Gartner conducted a managed services survey among 430 end-user organizations, of which, 271 organizations responded to TEM queries, highlighting the challenges and benefits of TEM deployment.

Note 1 Definitions of the TEM Stack

- Sourcing, procurement and vendor management refers to TEM vendors that negotiate prices, terms and conditions for telecom and network service contracts on behalf of customers.
- Ordering and provisioning management supports the commissioning and deployment of telecom/network services and mobile assets, tablets and devices based on predefined rates and support for user profiles, drawing on service catalogs, structured workflows and authorizations. Process services for ordering and provisioning include help desk services for order placement and logistics support relating to deployments, replacements and break/fix depot repairs. Also included are help desk services for cases where self-service portals cannot address end-user needs.
- Inventory management applies to processes and services that provide one or all of the following: wireline (voice and data) and mobile services; connected IoT services; cloud consumption-based services; mobile devices, tablets and IoT devices; and related infrastructure. Asset discovery, asset management, asset database/repository and asset portfolio management are also included. Inventory management also applies to the tracking of purchases, leases, contracts and disposal relating to telecom assets, cloud licenses, IoT, and

other related assets and expenses. Links to general ledger accounting system modules (such as the capital asset ledger) are common.

- Invoice and contract management combines the invoice audit function with the accounts payable invoice processing function.
- Usage management helps identify cost objectives and usage permissions by using call accounting and detailed invoice data. Usage is tracked to allocate costs by individual, department, cost center or other user-defined spending categories across corporate locations.
- Dispute management ensures the recovery of credits and management of short-pay and nopay decisions.
- **Reporting and business intelligence** encompasses a vendor's ability to offer customers practical information and analytics to improve financial forecasts and usage planning.

Gartner does not consider TEM solutions around element management for telecom infrastructure such as PBX and key telephone systems, Internet Protocol (IP) telephone equipment, and other voice communications infrastructure. Element management is covered in a typical network IT engagement. Over-the-air MDM is increasingly bundled with TEM offerings. Managed mobility services are an adjacent market, which many TEM players are morphing into.

Note 2 M&A Activity

While consolidation is sometimes thought to reduce buyer choice and increase pricing, this has not yet been observed in the TEM market. M&A acquisitions may continue over the next two years for technological enhancements and to enhance service delivery capabilities and scale in different geographic regions. Examples of consolidations include TEM providers expanding and enhancing technical capabilities through acquisitions:

- Marlin Equity Partners acquired MMS provider MOBI and integrated it with Tangoe in December 2018. With this acquisition, Tangoe extends its MMS quality and automation capabilities.
- Riverside Partners acquired U.K.-based TEM provider Veropath in June 2018. In addition, in January 2018, it completed its acquisition of European-based TEM provider A&B Groep and U.S. TEM provider ComView. These were added into the Calero portfolio to expand European capabilities and customer service.
- One Source Communications acquired Converging Technologies in 2017 to enhance enterprise architecture, network engineering and service delivery capabilities, and CMS Enterprises in 2018 to enhance IT service delivery, round-the-clock support capabilities and expand its communication life cycle management accounts.
- Ezwim was acquired by Globys at the end of 2018 to become a central part of Globys' B2B technology management offerings.



Note 3 Examples of Additional Vendors

Table 3. Other Vendors Active in TEM

Vendor TEM Type	Web Address	Location							
Mobile-Only TEM									
Bluewater	www.bluewatercontrol.com	Australia							
Mobile Solutions	https://mobilesolutions.net/	U.S.							
Mobilise IT	www.mobiliseit.com	Australia							
Navita	www.navita.com.br	Brazil							
Simplify Wireless	www.simplifywireless.com	Canada							
vMOX	www.vmox.com	U.S.							
VoicePlus	www.voiceplus.com	Australia							
Cloud TEM									
CloudCheckr	www.cloudcheckr.com	North America							
Other Regional TEM (Wireline and Wireless)									
Advantix	www.advantixsolutions.com	North America							
Avail	www.4avail.com	North America							
Habble (platform only)	www.habble.it/en/	Europe (Italy/Spain)							
Saaswedo (platform only)	www.saaswedo.com	Europe and North America							
Smartbill	www.smartbill.com.au/	Australia							
Teligistics	www.teligistics.com	North America							
System Integrators/ITOs/C	onsultants								
Accenture	www.accenture.com	Global							
Advocate	www.advocateinsiders.com	North America							
Digital Dimension	www.digitaldimension.solutions	Europe							
Econocom	www.econocom.com	Europe							
IBM	www.ibm.com	Global							



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Vendor TEM Type	Web Address	Location
Note: This is not an exhaustive list, but Global" and "Magic Quadrant for Mana	aims to provide additional examples. See "Critical Capabiliti ged Mobility Services, Global."	es for Managed Mobility Services,

Source: Gartner (June 2019)

Note 4 Representative Vendor Selection

Vendors included within this research are those that:

- Offer SaaS-based TEM offerings
- Foundationally offer both fixed and mobile TEM (not one or the other) and are expanding their offerings to include other technology areas such as cloud services, IoT TEM, other IT asset management and software tracking
- Are carrier-agnostic
- Go to market directly, offering their services as a fully managed and self-managed solution and have their own platform (rather than using a platform or another TEM vendor).

Mobile-only TEM vendors or pure-play MMS providers are **not** included here, but are found in other research areas, such as "Magic Quadrant for Managed Mobility Services, Global" and "Critical Capabilities for Managed Mobility Services, Global." Also, information on these companies can be provided via inquiry.

System integrators, IT outsourcers, consultants and communications providers offering TEM services are also not included in this research; yet, they offer TEM services using the platforms of pure-play TEM vendors. Examples of additional smaller U.S. players, ITOs or mobile-only TEMs (that are discussed on occasion) are included in Note 3, Table 3.



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