



AMALGAM INSIGHTS

Vendor SmartList Preview
CIO's Guide for Managing
Wireless Expenses in 2021

Sponsored by:

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 calero  mds

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EXECUTIVE SUMMARY

Key Stakeholders: Chief Information Officers, Chief Technology Officers, Telecom Directors and Managers, Mobility Directors and Managers, IT Architects, Vice President/Director/Manager of IT Operations, DevOps Managers, System Architects, Product Managers, IT Sourcing Directors and Managers, IT Procurement Directors and Managers

Why It Matters: As companies seek to recover from the COVID pandemic and support a New Normal hybrid workforce, the demand for enterprise mobility is increasing rapidly. Amalgam Insights estimates that enterprise mobility spend will increase by 12% in 2021 both to support this new work environment and to catch up on spend that was postponed in 2020.

At the same time, businesses face the IT Rule of 30, Amalgam Insights' rule stating that every unmanaged IT spend category averages a 30% opportunity to cut costs, including telecom, mobility, cloud, and software. This report explores 15 profiles of this report representing Amalgam Insights' current recommended vendors for managing wireless expenses out of the 50+ solutions that Amalgam Insights recommends in the management of mobile devices, data plans, accessories, and apps: Asignet, brightfin, Calero-MDSL, Cass Information Systems, Mindglobal, Motus, Network Control, One Source, Sakon, Tangoe, Tellennium, Upland Software, vCom, vMOX, and WidePoint.

Top Takeaway: This guide provides CIOs with the key trends, top vendors, and salient recommendations to move forward with an appropriate investment for wireless expense management at a time when wireless expenses are increasing rapidly and CIOs are asked to be good stewards of IT budget and spend. Wireless expenses expand far beyond rate plans and devices, as contracts, mobile support, invoice processing, workforce enablement, and the establishment of mobility as part of core IT and operations are also part of the total cost of ownership for enterprise mobility. To develop an efficient wireless expense management environment, IT departments must choose a solution that fits with the organization's current skills, mobility management needs, and additional concerns that may be related to mobility such as network bandwidth, security, process automation, and other spend areas.



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NOTE

This is a Preview of the full report. Profiles of sponsors are provided as examples of information available on all vendors covered in the full report. To read the full version of this report, please purchase at <https://amalgaminsights.com/product/vendor-smartlist-cios-guide-for-managing-wireless-expenses-in-2021/> or speak with our Client Services Director Lisa Lincoln (lisa@amalgaminsights.com) to gain access based on your current account status with Amalgam Insights.

INTRODUCTION TO THE CIO'S GUIDE TO MANAGING WIRELESS EXPENSES

This report is designed to help businesses to identify vendors that can cut enterprise mobility costs while providing the governance and support necessary to effectively manage smartphones and other cellular devices. Amalgam Insights defines "wireless expense management" vendors as companies that help businesses to manage the costs of cellular device fleets, which may include smartphones, cell phones, related accessories, Internet of Things (IoT) SIM cards, and global SIMs to support international roaming, as well as the data plans, applications, and other costs associated with purchasing enterprise mobility capabilities from telecom carriers.

As this report shows, these capabilities are typically bolstered by software and analytics to support the invoice processing, rate plan optimization, service orders, and contract management associated with wireless expenses. These vendors also typically have some level of managed services, as many businesses find that wireless expense management is not a core internal capability, and even organizations with this subject matter knowledge often find aspects of this practice — such as invoice processing and service order fulfillment — to be areas better handled through an outsourced third party. As enterprise mobility has developed, many of these vendors have also grown to support managed mobility services, including help desk, customized device kitting and support, device security, and device recycling, all of which are intended to reduce the total cost of ownership for enterprise mobility while increasing the value of the mobile fleet.

ENTERPRISE MOBILITY HAS FUNDAMENTALLY CHANGED IN THE FACE OF COVID

ANALYST OBSERVATION: KEEPING UP WITH THE CASH SPENDING TRENDS OF IT



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WHAT MAKES A WIRELESS EXPENSE SOLUTION DIFFERENTIATED?

FINAL RECOMMENDATIONS FOR THE CIO OFFICE IN SELECTING A WIRELESS EXPENSE SOLUTION

VENDOR PROFILE: ASIGNET

VENDOR PROFILE: brightfin

VENDOR PROFILE: CALERO-MDSL

ABOUT CALERO-MDSL

Calero-MDSL is a technology expense management solution provider with origins reaching back to the founding of Veramark in 1983. Calero-MDSL is a private equity company owned by lead investors Riverside Partners and Oak Hill Capital as well as Sumeru Equity Partners and was built by the 2019 merger of Calero-MDSL (itself founded in 2013 through the mergers of Movero, Pinnacle, and Veramark), and MDSL, founded in 1995 to support market data contracts. This combination of solutions along with subsequent acquisitions has led to a single company that manages network, mobility, cloud, and software spend as well as network mapping with the [recent acquisition of MetaPort \(now called TrueInsight\)](#)

Calero-MDSL is headquartered in Rochester, NY, with major offices in Phoenix, the United Kingdom, and Hong Kong. The vendor currently has over 800 employees on staff and manages \$22 billion in technology spend for over 3,000 clients across over 100+ companies, making Calero-MDSL the current leader in technology expense management from the perspective of technology-specific spend under management based on Amalgam Insights' analysis. For these clients, Calero-MDSL manages over 3 million mobile devices and the average client averages over five years in tenure. Calero-MDSL customers typically have a minimum of 1,000 mobile devices, \$3 million in annual wireline spend, or 5,000 UCaaS (Unified Communications as a Service) licenses. Calero-MDSL provides flexibility to these metrics as long as the client reaches at least one of these minimum areas.

THE CALERO-MDSL OFFERING

For Calero-MDSL, wireless expense and managed mobility services are a part of its larger technology expense offering. These services are based on providing a single source of truth, global invoice management, and global support. One aspect that makes the Calero-MDSL support structure different is that it has country-specific business units that duplicate all aspects of sales, support, and operations for the regional area being supported. These duplicate operations are designed to improve customer experience.



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The Calero-MDSL mobility expense management offering is based on inventory, invoice, and contract management. The new TrueInsight offering (formerly MetaPort) will add inventory-building capabilities for routers and networking equipment associated with Wi-Fi and connectivity. This offering is built with risk mitigation in mind to support enterprise concerns around unexpected cost and inventory changes.

Unified endpoint integration from Calero-MDSL is built to support Apple Business Manager and Device Enrollment as well as Samsung Knox to support inventory tracking, as their experience has found that customer service records and daily usage files can potentially lag months behind actual changes and disconnections.

Contract management is typically handled by translating the contract into an EDI format and working with the client's existing contract management system. Calero-MDSL holds quarterly audits for contract addendums and disputes, in addition to real-time invoice audits with rate validation. With natural language processing, the vendor can find new language and changes, but not parse what those changes mean from a discounting or term commitment perspective where a human is still needed to translate those changes into potential actions.

Calero-MDSL has eBonding in place with Verizon Wireless, AT&T, and is aggressively pursuing eBonding capabilities with T-Mobile and TELUS. Additionally, the company is working on achieving eBonding with Vodafone to support automated service orders and updates. This capability provides value and improves Total Cost of Ownership for mobility as eBonding accelerates service level agreement management, reduces manual errors, provides more reliable transactions that do not require follow-up, and lowers operational costs.

These updates can also allow Calero-MDSL to conduct weekly or in-cycle optimization recommendations based on usage updated on a daily or even semi-daily basis. This information can also be used to make service order changes for a bill up to the 48- or 72-hour limit before a bill is created to support timely changes within a bill cycle.

From an optimization perspective, Calero-MDSL aims for a target of having clients within 2% of their data ceiling, meaning that if a client used 9.8 terabytes of data in a month across all users, the client would pay for no more than 10 terabytes.

The vendor also uses a variety of machine learning and artificial intelligence tools to support invoice collection and ingestion. Calero-MDSL has developed a no-code user interface that allows its operations team to train the invoice ETL (Extract, Transform, and Load) engine to automate invoice processing as invoice changes occur. These employee-guided bots provide a combination of human expertise and process automation efficiency.

Pricing is handled based on a value-based perspective, which differs from many of Calero-MDSL's competitors that have a list price for per-device or percentage of spend perspective. As a result, Calero-MDSL's pricing is dependent on the specific needs for organizational support.



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COMPETITION AND COMPETITIVE POSITIONING

As a vendor focused on enterprise accounts, Calero-MDSL regularly runs into Tangoe and sometimes Sakon and Cass as large enterprise deals are almost always based on some sort of competitive bid. In these deals, Calero-MDSL wins based on four main areas:

- ◆ Customer service and delivery capabilities that are both localized in nature and global in scope
- ◆ Audit and optimization capabilities across contract, inventory invoice, dispute, and verification
- ◆ Ability to support mobile unbilled usage both in-cycle and out of cycle
- ◆ End-user Mobility Portal with integrated eBonding capabilities.

From Calero-MDSL's perspective, carrier services are only a portion of enterprise mobility, as mobile device and unified endpoint management, applications, UCaaS, SaaS, video, and bandwidth are all aspects that affect the mobile experience. To match these functional areas, Calero-MDSL has seven internal centers of excellence built in the areas of customer value, invoice lifecycle, inventory, audit, provisioning, mobility, and implementation.

Calero-MDSL focuses on a customer-centric approach that includes localized support and builds on its experience as a global solution, which includes both the in-house experience from the MDSL side as well as acquisitions made by Calero-MDSL including Netherlands-based A&B Groep in 2018.

CALERO-MDSL'S PLANS FOR THE FUTURE

Calero-MDSL's roadmap includes increased product investment across mobility, SaaS, and telecom expenses. There are plans to increase access and visibility to unbilled usage, expectations to increase eBonding support with additional carriers, and to provide greater value from automated audit and optimization capabilities. Calero-MDSL also plans to support bulk orders for multi-region SIM cards and Internet of Things-based eSIMs. From a user interface perspective, Calero-MDSL plans to invest in the integration of analytics and tutorials to provide a more intuitive user experience to both onboard employees more easily and increase the potential adoption of TEM in the enterprise.

AMALGAM INSIGHTS' RECOMMENDATION

Calero-MDSL is recommended for consideration for companies with over 1,000 mobile devices, especially if these devices are spread across multiple countries. The Calero-MDSL global footprint, deep experience with document scanning and data subscriptions from its market data management heritage, and work on improving each incremental part of the platform have all led to consistent customer wins in global wireless expense deals. Calero-MDSL's focus on onboarding, user experience, and analytics has led to improvements both in customer retention and satisfaction. The Calero-MDSL combination of mobility expense, SaaS expense, UCaaS expense, and network expense are well-suited to supporting cost optimization across the increasingly intertwined spend areas of software, hardware, and connectivity.

VENDOR PROFILE: CASS INFORMATION SYSTEMS



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VENDOR PROFILE: MINDGLOBAL

VENDOR PROFILE: MOTUS

VENDOR PROFILE: NETWORK CONTROL

VENDOR PROFILE: ONE SOURCE

VENDOR PROFILE: SAKON

VENDOR PROFILE: TANGOE

VENDOR PROFILE: TELLENNIUM

VENDOR PROFILE: UPLAND SOFTWARE

VENDOR PROFILE: vCom SOLUTIONS

VENDOR PROFILE: vMOX

ABOUT vMOX

vMOX is a wireless cost optimization provider founded in 2011 and headquartered in Port Washington, N.Y. It is a privately held company with no outside investment. As of July 2021, the firm has 70 employees across three offices and has increased staff count at a rate of roughly 34% year-over-year. vMOX does not publicly disclose revenue, devices under management, or spend under management. However, it claims more than 200 customers, including three Fortune 500 clients with approximately a third of clients with over \$1 billion in annual revenue. vMOX focuses on companies with more than 1,000 devices. It places its customers into two separate categories: mid-market, for companies between 1,000 and 5,000 devices, and enterprise, for larger device fleets.

vMOX currently claims 95% client retention year-over-year with a Net Promoter Score of 71. Executives say they spend 25% of vMOX's annual revenue on research and development to improve cost optimization and mobile lifecycle management capabilities. vMOX has three patents to support its cost-optimization technologies. The latest, Patent 10,959,083, awarded March 23, 2021, addresses application-level usage-based optimization.

VMOX'S OFFERING

vMOX goes to market as a pure-play Managed Mobility Services vendor focused on two key areas: expense management and lifecycle management. The expense management offering consists of cost optimization, audit, reporting and analytics, fraud detection, and behavior modification. The lifecycle management offering comprises provider, inventory, and device management, compliance, mobile help desk, and device logistics. vMOX's unified endpoint management (UEM) support consists of integrations with UEM vendors as well as consulting to support



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mobile policy, profile, and compliance. vMOX's logistics service includes support for UEM workflows and for vMOX's own in-house UEM solution for customers that do not currently have a third-party UEM.

Usage is tracked on a daily basis, and vendor plans and offerings are updated as frequently as carriers allow. For AT&T and Verizon, these plans update daily. This activity allows vMOX to proactively recommend and change calling plans between bill cycles, either on an automated basis or by employee authorization of each change. vMOX breaks out these preemptive moves into service-impacting and non-service-impacting charges across cancellations, suspensions, and feature and plan changes.

This combination of usage and vendor plan analysis also allows vMOX to make initial recommendations as quickly as seven days after onboarding. That compares to waiting for a first invoice or three months of history to begin optimization. vMOX claims this approach can allow it to save 20% or more within wireless expense environments previously optimized through more simplistic means. Reference customers have verified that assertion.

vMOX delivers its expense management, service order lifecycle, and contract negotiations capabilities as part of its standard fee, which starts at \$2.50 per device per month for an entry-level quantity. Mobile help desk to provide technical support for enterprise users is available at an additional cost, either with 8 AM – 8 PM Eastern Time Zone coverage five days a week or 24/7 for an additional cost. vMOX defines "help desk" as calls with end users who have submitted a service ticket. vMOX also provides device logistics on a per-transaction basis, and a variety of professional services, including contract negotiations, carrier RFP management, mobile policy development, and mobile strategy. vMOX administers the majority of its services in-house through its employees. The only exceptions are 24/7 help desk and device recycling; partners oversee both of those add-on options.

vMOX developed a mobile app, called vMOBILITY, to give end users visibility into usage and cost. Furthermore, the app allows vMOX to track consumption and enforce geofencing on corporate-liable devices. The latter capability supports activity such as adding and removing roaming, long-distance, or data plans, based on device location. This eliminates enterprise IT waiting days or weeks for overages to show up.

In addition, vMOX's internally developed software scans client accounts for potential fraud and device misuse. For example, if a customer ordered 10 new iPhones that show no usage within two or three weeks, the system sends an alert. The platform also flags if a different SIM card has been inserted into a device or if an employee streams excess amounts of corporate-paid data outside of work hours. Regarding behavior, enterprises may set policies that inform staff of likely overuse, either through text, email, or vMOBILITY notification. This proactive monitoring is designed to prevent issues before additional funds are spent.

COMPETITION AND COMPETITIVE POSITIONING

At the mid-market level, vMOX competes most often against spreadsheets and in-house solutions. Here, vMOX estimates that more than 95% of its clients with fewer than 5,000 devices do not have an incumbent MMS provider. Conversely, in enterprises with 5,000 or more devices, vMOX competes most often against Asignet, Calero-MDSL, Sakon, and Tangoe.



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vMOX states that it wins business based on the following characteristics:

- ◆ vMOX takes a proactive and algorithmic approach to adding and subtracting features and plans. It also avoids data, roaming, and long-distance overages by analyzing and acting on usage and geofencing behavior. This quantitative process has provided up to an additional 20% in savings for new clients in addition to what other technology expense management vendors may have previously found in prior optimization activities.
- ◆ vMOX can provide actionable guidance to save money within seven days of initial implementation and onboarding, which it compares to the 60-90 day initial benchmarking period provided by other vendors
- ◆ vMOX sends proactive, daily reviews on savings recommendations, rather than holding monthly or quarterly reviews that depend on client schedules. This approach accelerates savings in uncertain times, such as the 2020 COVID-19 shutdown when data usage patterns became difficult, if not impossible, to predict.
- ◆ vMOX only counts recommendations that result in customer savings, as opposed to including recommendations not acted upon.

From a wireless expense management perspective, Amalgam Insights believes vMOX is most differentiated from competitors in cost optimization; the offering has undergone continuous development over the past decade. vMOX's cost optimization uses an algorithmic and patented approach to compare each device to a complete database of vendor plans on a near-real-time basis. This approach is quantitatively more advanced than the tools available through spreadsheets and standard business intelligence tools because it includes a procedural methodology to train optimization models. It also features a machine learning engine that runs a variety of models against the data, and it enables trained professionals to guide these models regarding the correct recommendations to supply.

vMOX supplied testimonials from E. M. Tharp, RAM Construction Services, Samtec, and Watco Companies to support its claims and positioning as part of this evaluation. It also shared endorsements from three companies with multi-billion-dollar revenues that declined to be publicly named for this research.

vMOX'S PLANS FOR THE FUTURE

To further support mobility management, vMOX plans to carry out the following:

- ◆ Expansion into Europe in 2021 to offer full lifecycle management services
- ◆ Add natural language processing to support invoice data and classification across multiple languages
- ◆ Augment contract negotiations with natural language processing
- ◆ Improve self-service chatbots with deep learning
- ◆ Bring white-label capabilities to vMOX's partner community
- ◆ Continue early adoption and integration with carrier technology to support proactive cost reduction
- ◆ Increase investment in large enterprise sales to support its target customer base
- ◆ Adjust pricing and discounting to match market trends



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AMALGAM INSIGHTS' RECOMMENDATION

Based on vMOX's managed mobility services and capabilities, Amalgam Insights recommends vMOX as a solution for organizations with 1,000 or more devices seeking to optimize wireless costs and to outsource mobility management. vMOX's algorithmic approach allows it to automate decisions and support wireless optimization at scale. Finally, Amalgam Insights believes the lifecycle capabilities vMOX extends as part of its standard management fee stand out compared to vendors that price those same capabilities on a separate, one-off basis.

VENDOR PROFILE: WIDEPOINT

APPENDIX

Additional wireless expense vendors covered by Amalgam Insights that were considered for this report include: 4TelecomHelp, Accenture (NYSE: ACN), Advantix, AMI Strategies, Ascension Mobile, Auditel, Avema, Bruin, CarrierBid Communications, Enteleger, G2, GoExceed, GSI - Bill Genie Mobility, IBM Global Technology Services (NYSE:IBM), ICOMM, Intratam, ISG, Isimplexity, LB3&TC2, Mobilsense, MTS (OTC:MTSL), NetPlus Mobility, OpDecision, Ovation Wireless, Profit Enhancement Systems, Renodis, SaaS Swedo, SmartCell, Smartel, Softelgent, SpikeFli, sutiWEM-S, TeleManagement Technologies, The Bill Police, Veroxos, and Wireless Watchdogs.

ABOUT AMALGAM INSIGHTS

AMALGAM INSIGHTS

is a leading research and advisory firm focused on the financial, programmatic, and cognitive tools that multiply the value of enterprise technology, including the following research practices: Technology Expense and Budget Management, Analytics and Data Management, Data Science and Machine Learning, Accounting and Finance Technologies, DevOps and Open Source Development, Talent Management, Learning & Development, and Extended Reality.

HYOUN PARK, FOUNDER AND CHIEF ANALYST

Hyoun is the Founder and CEO of Amalgam Insights. He focuses on Technology Consumption Management challenges of procurement and utilization based on 20+ years of vendor, enterprise IT, and industry analyst experience.

Prior to Amalgam Insights, Hyoun led IT analyst practices at the Aberdeen Group and Blue Hill Research with over 300 research documents across analytics, mobility, finance, and collaboration; managed multi-million-dollar technology budgets at Bose and Teradyne; supported billing data operations for two resale telecom CLECs; and built prediction models for the first Fantasy Baseball website, mosey.com





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KELLY TEAL, SENIOR RESEARCH ANALYST

Kelly Teal has worked as a journalist, editor, and analyst for more than 20 years. At Amalgam Insights, she covers the business value of implementing and managing technologies; this approach includes vendors, processes, and best practices. Kelly helps enterprises, small and medium businesses, and other end-user organizations understand the tools at their disposal, and the ways in which they can improve finances and operations.



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