

Magic Quadrant for Field Service Management

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Summary

The FSM market is growing rapidly in response to proven business results from projects and technology developments in mobility, SaaS and machine learning. Application leaders on product selection projects should use this assessment of qualifying vendors as part of their evaluation process.

Strategic Planning Assumptions

Through 2020, 80% of organizations with more than 75 field technicians will miss more than 20% of the planned efficiency gains due to incomplete integration or deployment.

By 2020, two out of three large field service organizations will equip field technicians with a mobile application that drives profitability by creating revenue streams, efficiency and customer satisfaction.

Market Definition/Description

Field service operations dispatch technicians to customer locations to provide services, typically installation, repair or maintenance, for customer-owned equipment or systems. The equipment or systems may be actively managed, maintained and monitored under a predefined service or maintenance contract. FSM applications optimize procedures, information flow and data capture through a set of processes and capabilities (see "The Six Categories of Field Service Management Application Functionality").

In addition to analytics and integrations to ERP and other CRM applications, such as contact center agent desktops or sales force automation, FSM applications provide globally available capabilities to:

Manage demand — The receipt of work requests from external sources, such as customers (through multiple channels), Internet of Things (IoT) connectivity and service brokering networks, and from internal systems, such as ticketing or MRO, product life cycle management, long-cycle project management and enterprise asset management solutions.

Plan work — Workload balancing and shift requirements forecasting, schedule optimization for short- and long-cycle work requests, SLA and cost prioritization, parts demand planning and purchasing, contracted or contingent third-party service provider enablement, and geographical information system (GIS)-based planning.

Inform and enable technicians — Mobile applications for GPS, telematics, equipment work history, social collaboration and customer communication, knowledge and work instruction management, inspections, safety forms, parts sourcing, and customer quoting.

Debrief work orders – Online or offline mobile collection of time and parts used, tasks completed, updates to equipment records, customer recommendations, sign-offs, approvals for additional work, and satisfaction surveys.

Manage operations – Installed equipment management, maintenance agreement management, maintenance plans, warranty and claims management, reverse logistics, depot repair, equipment supersession, engineering change requests, customer pricing management, and invoice preparation.

Note: Although most FSM vendors offer a light fleet management capability to support managing technician vans, this is not their focus. This Magic Quadrant does not evaluate fleet management vendors because they tend to be more focused on vehicles and other mobile assets than on technicians. Also, enterprise asset management (EAM) vendors are evaluated in a separate Magic Quadrant (see "Magic Quadrant for Energy and Utilities Enterprise Asset Management Software"). These vendors tend to focus on plant and other internally owned assets as opposed to externally owned assets, as is the case in FSM.

Magic Quadrant

Figure 1. Magic Quadrant for Field Service Management



Source: Gartner (November 2016)

Vendor Strengths and Cautions

Astea International

Astea International is positioned in the Niche Players quadrant on the basis of its market understanding, breadth and depth of product functionality, and its support for complex service needs. It is a publicly traded company listed on the Nasdaq Stock Exchange.

Alliance is Astea's product for large enterprises, and its new deployments are evenly split between SaaS and on-premises or private cloud. Alliance has over 180,000 users across more than 10 industries, primarily in complex and equipment-centric service industries such as high-tech, medical device and equipment service providers (e.g., HVAC and building controls). We estimate that over three-quarters of its new implementations are in North America, with the remainder in Europe, the Middle East and Africa (EMEA). In addition to analytics, demand

management, planning, mobile technician enablement and debrief, Alliance also has operations capabilities such as maintenance contract management and planning, equipment management, parts management, invoicing, depot repair, and logistics.

STRENGTHS

Product breadth and depth: Astea's functionality is among the deepest and broadest of the qualifying vendors. As examples, Astea's scheduling optimization engine can "explain" how it made a scheduling choice, and its mobile app helps a technician economically source parts from the best channel based on call urgency. Astea has also updated its long-standing IoT capabilities with a development partner.

Mobile app: Astea's mobile app has deep enablement capabilities that help technicians initiate workflows such as returns, opportunities, parts sourcing and payment collection. It also allows admins to create proprietary forms and fields for activities such as maintenance and safety checklists.

Customer loyalty: Astea's customer retention rate was among the best of the qualifying vendors in this Magic Quadrant. Product depth, breadth and office application flexibility contribute to this loyalty.

CAUTIONS

Growth: Astea has a large and stable customer base, but its growth in overall recurring contract value as a percentage in the year to March 2016 was below average among its competitors in this Magic Quadrant. This is partially due to it selling a higher percentage of perpetual licenses than some vendors. New sales are also slightly lower year over year.

Customer experience: Ratings provided by six reference customers for customer experience components (user community, implementation length, upgrades, communication and so on) were slightly lower than those of many of its competitors in this Magic Quadrant. Astea is focusing on these areas, and customers have reported improvements.

Ecosystem: Astea has relationships with some large implementation partners and has added implementation and development partners recently, but its ecosystem remains smaller than those of other end-to-end FSM competitors. Due to product breadth, depth and complexity, Astea performs most implementation activities itself, which limits customer choice.

ClickSoftware

ClickSoftware is positioned as a Leader on the basis of its sales, partnerships, user base, integration and field service focus. Previously a public company, it was acquired by Francisco Partners in July 2015 for \$438 million.

ClickSoftware has strong scheduling optimization and mobile capabilities, but also covers analytics, technician enablement and debrief. ClickSchedule, part of its on-premises SO (Service Optimization) Suite, has over 600,000 users, mostly in large utility and telecom organizations, but also in manufacturing, high-tech, healthcare and service provider industries with volatility in technician schedules. We estimate that over three-quarters of its new implementations are in North America and EMEA, with the remainder in Asia/Pacific (APAC) and South America.

Click Field Service Edge (CFSE), released in 2016, can be deployed in a multitenant SaaS cloud or private cloud. ClickSoftware has over 100,000 users (primarily SMBs) on the StreetSmart suite, which it evolved from the Xora mobile solutions it acquired in 2014.

STRENGTHS

Partnerships and capacity: ClickSoftware is sold through other FSM providers including Salesforce (Field Service Lightning), SAP (Workforce Scheduling and Optimization by ClickSoftware) and ServiceBench. It has several large SI and implementation partner relationships, especially in North America and EMEA.

Platform and integration: Rapid mobile app development (RMAD) and form creation are available via its Mobility Studio, and its packaged app is a hybrid of HTML5 and local storage to maximize offline capabilities. ClickSoftware has standard connectors for certain SAP, Infor and Esri applications, and live integrations to many others.

R&D: ClickSoftware has introduced capabilities such as routing using predicted traffic and predicted completion durations based on historical actuals for the assigned technician. It has added field supervisor mobile apps and customer engagement management, along with integrations in areas such as IoT and augmented reality (AR).

Viability and stability: ClickSoftware has the largest user base of the vendors we reviewed, and a low customer attrition rate. This provides a recurring revenue stream that enables it to continue to invest in the software. Both new sales and ARR have improved year over year.

CAUTIONS

Product transition: ClickSoftware has taken over two years to deliver CFSE and extend its hosted scheduling "optimization as a service." It has begun allowing its customer base to transition to CFSE at their own pace. Assisting migrations and continuing to enhance and support both product lines will consume some of its R&D and delivery capacity.

Cost: License pricing and implementation costs for ClickSoftware's solutions are higher than those of many competitors, and may be difficult to justify for organizations seeking low-cost solutions to simple scheduling problems.

Customer experience: Reference customers scored ClickSoftware lower than many of its competitors for customer experience components, such as its partners, vendor relationship and responsiveness, upgrades, and services.

Product breadth: Organizations that require certain operations capabilities (e.g., complex billing, agreement entitlements, predictive maintenance planning, quoting, warranty, reverse logistics and depot repair) will need an additional integrated solution to cover these requirements.

Comarch

Comarch is a new entrant and positioned in the Niche Players quadrant on the basis of its focus on telecom companies and on-premises implementations (more than 90% of its customers deploy on-premises). It is a publicly traded company and is listed on the Warsaw Stock Exchange. It has over 15,000 users globally, primarily in telecom organizations in EMEA. Comarch also targets financial services, insurance and high-tech companies, as well as those with heavy IoT requirements.

Comarch Field Service Management has functionality that covers demand management, scheduling and route optimization, mobile technician enablement and debrief, fulfillment partner management, analytics, and some operations functionality such as SLAs and equipment

management. Comarch offers ERP functionality but also integrates its Field Service Management product to other ERPs.

STRENGTHS

Viability: Comarch is a large and profitable, publicly traded company with presence worldwide, including in regions such as the Middle East and Russia that are not served well by its competitors.

Industry focus: For telecom, Comarch embeds processes, data structure and integration options that comply with standards. For insurance companies, it has a new mobile app to help claims adjusters in the field collaborate and integrate data to a central claims system. For equipment-centric companies, it has a proprietary IoT solution that enables automatic work order and task creation based on predicted maintenance requirements.

Value: Comarch's perpetual licensing is one of the more affordable options we reviewed. Also, its reference customer rating of value, including implementation, software, support costs and return on investment, was among the best of its competitors.

CAUTIONS

Customer satisfaction: Reference customers indicated that Comarch's implementations were among the longest of the vendors we reviewed. This is due in part to heavy integration requirements and automating manual processes. Customer experience scores were below average despite value being scored highly. It performs almost all implementations itself, limiting its ability to offer local implementation and support.

Product breadth: While Comarch offers an end-to-end field service solution, operations functionality such as contracts, inventory management and pricing are part of its ERP. Customers purchasing the product stand-alone will need to integrate to similar functionality in either their ERP or an alternative solution.

Customer loyalty: Its customer retention rate (measured in terms of annual contract value) for the year to March 2016 was among the lowest of the vendors we reviewed.

Coresystems

Coresystems is a new Niche Player on the basis of its sales execution as well as improved UI and demand management, scheduling, and mobile technician enablement capabilities. It raised \$13 million of additional funding in 2016 for global expansion, bringing its total funding to \$44 million.

Coresystems' field service management application is delivered only via a multitenant SaaS model. It has approximately 148,000 users across many industries, with the largest numbers in manufacturing, energy and utilities, medical device, oil and gas, retail, and automotive organizations. We estimate that more than three-quarters of its customers are in the EMEA region, but Coresystems has consistently added small customers through its partners in North America, APAC, and South and Central America. Coresystems' browser applications utilize the Google material design framework, and its native mobile apps for Android and iOS use SQLite and a proprietary reporting engine.

STRENGTHS

Platform and integration: Coresystems enables admins to develop alerts and notifications without code, as well as multilingual, multilayered mobile forms to provide work instructions with pictures or enable technicians to collect inspection data. It provides integrations to several leading ERPs and CRMs, including SAP, Oracle, Microsoft and Salesforce.

Cost: Coresystems offers software license pricing tiers optimized for SMBs that require less complexity than large enterprise organizations. When combined with other cost factors, such as support, implementation and internal support, customers scored the total cost of ownership among the best of the qualifying vendors.

Development partnerships: Coresystems partners with its customers to add and test functionality. As an example, Mila is a joint venture between Coresystems and Swisscom with a platform to enable companies to offer their customers access to a crowdsourced technician base of "friends" (a community of freelance technicians and other customers).

CAUTIONS

Product breadth: Those needing full end-to-end FSM functionality will need to utilize at least one additional vendor. Coresystems customers typically rely on integration to functionality in their ERP system – most often SAP – for operations functionality such as installed equipment management, contract entitlements, invoicing and all financial activities.

Product depth: Coresystems workflows have limited flexibility, and the object model does not support complex service requirements such as multitiered equipment or segmented work orders. Scheduling optimization is primarily accomplished on a per-work-order basis – ill-suited for high-volume intraday scheduling optimization needs.

Ecosystem: Although Coresystems has over 400 resellers, many are small service shops that are not suitable for large projects. Finding a suitable enterprise system integrator may be a challenge for large, global customers.

FieldAware

FieldAware is a new entrant to the Magic Quadrant and is positioned in the Niche Players quadrant, based on its focus on mobile technician enablement, work order debrief and other data collection on behalf of systems of record such as ERP and CRM. It has raised a total of \$51.5 million over four rounds of funding.

FieldAware's field service management application is delivered only via a multitenant SaaS model. It has over 15,000 users worldwide across 10 industries, mostly in commercial service providers as well as industrial and heavy equipment manufacturing, high-tech, and oil and gas companies. We estimate that two-thirds of its new deployments are in North America, one-quarter are in EMEA and the rest are in APAC.

STRENGTHS

Growth: FieldAware's year-over-year growth percentage in its multitenant SaaS business in the year to March 2016 was among the highest of those we reviewed. This growth will help it to fund product development and geographic expansion.

Integration: FieldAware is designed to complement and integrate to ERP systems of record (e.g., NetSuite, SAP Anywhere, Oracle, QuickBooks, Microsoft Dynamics) and CRM systems (e.g., Salesforce, SugarCRM, NetSuite). It is adding integrations through a development API partnership.

Implementation costs: FieldAware offers tools that help accelerate the implementation process, and has partnerships with large implementation organizations in the ERP channels it serves. Customer references and feedback indicate that it is one of the fastest to implement, and that its value and overall customer experience are thought of highly.

CAUTIONS

Product breadth: FieldAware relies on Routific for scheduling optimization and routing, and entirely on ERP and CRM systems for operations capabilities such as contract entitlements, depot repair, warranty management and equipment management. It does not offer integration for parts sourcing from other technicians, warehouses or purchasing. Those considering NetSuite or adding FieldAware to an existing NetSuite deployment should note Oracle announcing its intention to acquire NetSuite, which could lead to overlapping functionality in Oracle Field Service Cloud.

Languages and pricing: FieldAware is currently in the process of adding languages besides English and hosting locations outside of North America – but these will be new. It charges extra at the user and module level for each CRM and ERP integration. It does not offer perpetual licenses or on-premises deployments.

Extensibility: Adding forms and functionality in mobile is complex and handled primarily by FieldAware's own professional services team. Organizations that need proprietary safety checklists, inspection data collectors or instructional checklists in mobile will need to rely on FieldAware to develop these. FieldAware also does not have formal relationships with large SIs.

IFS

IFS is positioned as a Leader on the basis of its consistent growth, broad vision and user base stability. Its roots are as an ERP vendor, and it continues to invest in an FSM center of excellence.

IFS has two options for end-to-end field service, both of which interface to its Mobile Workforce Management product (formerly 360 Scheduling) to provide scheduling optimization. IFS has a user base of over 250,000 service application users worldwide (including workforce-management-only licenses). We estimate that over three-quarters of its new implementations are in North America or EMEA, with the remainder in APAC or Latin America (LATAM).

IFS Applications for Service Providers is built inside of IFS ERP as a single-tenant application. It focuses on midsize companies that want an ERP solution with supply chain functionality tailored for service-oriented industries. IFS Field Service Management can be delivered in a multitenant deployment. It targets both large enterprises seeking best-of-breed field service and integration to a non-IFS ERP, and small companies seeking a simple-to-configure, stand-alone solution. Both solutions have been adopted by industries with complex service requirements, such as high-tech, medical device, oil and gas, aerospace and defense, discrete manufacturing, and equipment service providers.

Private equity firm EQT increased its equity position in IFS from 68% to 100% in October 2016, after the evaluation period for this Magic Quadrant. EQT has stated that FSM remains a key investment area, but IFS was evaluated separately.

STRENGTHS

Industry focus: IFS provides implementation templates and specific functionality by industry. For example, utilities manage linear networked assets (such as energy transmission lines and pipelines).

Mobile extensibility: Mobile apps are built natively but the UI is rendered dynamically, so admins can change menus, screens and branding (this requires a mobile admin app) as well as develop workflows that are specific to each team, role or work order.

Viability: IFS has experienced strong growth in its top and bottom lines for many years in a row, and it has had very low customer attrition rates. Its partner network is approximately 25% larger in 2016 than it was in 2013.

R&D: IFS Labs focuses on new and innovative solutions, such as AR as well as proofs of concept for wearables and IoT. IFS expects its recent acquisition of MainIoT Software in Finland to accelerate its entrance into the IoT space.

CAUTIONS

SaaS adoption: IFS Field Service Management can be delivered in a multitenant model, but the vast majority of customers have opted for single tenant hosted on-premises or in Microsoft Azure, either by the customer or by IFS. They typically cite security as the reason.

Ecosystem: While IFS does certify implementation partners through IFS Academy, it sells primarily through a direct sales organization. Despite recent growth, its partner ecosystem is still considerably smaller than those of its ERP peers.

Implementation: IFS reference customers indicated longer-than-average implementation times, particularly for the full-scale rollouts.

Customer experience: Field Service Management reference customers scored their service experience and relationship with IFS below the average of vendors that qualified.

Microsoft

Microsoft acquired FieldOne Systems in 2015 and rebranded it in spring 2016. As of the period covered by this research, it is available as an add-on to Dynamics CRM, but the vendor indicates it will also become available as a stand-alone application or as part of Dynamics 365. It has many new customers that are SMBs or larger, especially in financial services, healthcare, manufacturing, medical device, CPG and government industries across EMEA, APAC and LATAM. We estimate that Microsoft Dynamics has an FSM user base of between 40,000 and 60,000 users, most of whom have come from new sales.

The updated FSM offering is a new entrant to the Visionaries quadrant on the basis of product breadth, including high-level maintenance agreements, parts and purchasing management, return of materials authorizations (RMAs), and return to vendor (RTV) management, as well as scheduling optimization, mobile technician enablement and debrief.

STRENGTHS

R&D: FSM is part of the Cloud and Enterprise group at Microsoft, which also oversees Azure IoT, machine learning and stream analytics. The engineered integration between these products will enable customers to source new solutions, such as its "connected service" that combines IoT and predictive analytics, from one vendor.

Platform and extensibility: Microsoft's FSM capabilities are built on the Dynamics 365 platform and inherit its toolset. Admins can repurpose and extend the capabilities used in customer service and sales, such as portals, knowledge management and Skype for Business, to FSM.

Sales execution: Justified by recent traction, Microsoft is investing to grow the geographical reach of its FSM solution, including new language translations (there are 44 available for no additional charge), data centers, channel training and consultant certification programs.

Product breadth: Microsoft's FSM now includes capabilities that are often found only in ERP, such as project service (long-cycle work), purchase orders, inventory management for multiple warehouses, and logistics.

CAUTIONS

Product transition: Much of Microsoft's support, implementation and partner ecosystem is new to the product, and customer feedback reflects this inexperience. Reference customers scored customer experience items such as support responsiveness, services, vendor relationship and market expertise among the lowest of all qualifying vendors.

Product depth: Microsoft's product is lacking some features, such as warranty management and quoting via the mobile app. Some key capabilities are new and unproven, such as the new versions of scheduling optimization and forecasting.

Integration: Outside of Dynamics, there are no formal connectors or certified integrations to systems of record such as ERPs, other CRMs or GIS applications available directly from Microsoft (although GIS integrations are planned). Companies that use a different CRM solution will prefer an FSM application that does not require a Dynamics platform.

Mobile application: Although the underlying technology is from Xamarin (now owned by Microsoft), Microsoft uses a third-party vendor called Resco to manage the native mobile applications. As Microsoft evolves its mobile offerings, admins will need to manage different tools for different CRM mobile apps.

Oracle

Oracle acquired TOA Technologies in 2014 and has since positioned it within the Oracle Service Cloud pillar of its Oracle Customer Experience Cloud offering, as Oracle Field Service Cloud (OFSC). OFSC has been architected as a multitenant SaaS solution since its release in 2003, and Oracle's continued innovation and delivery ecosystem have helped to again position it as a Leader.

OFSC's Core Management and Routing modules focus on demand management and scheduling optimization. OFSC also covers work planning, parts planning, technician enablement, customer communication and work order debrief. Gartner estimates that it has over 175,000 users in North America, EMEA, APAC and South America across several industries, primarily in telecom and utilities but also in the high-tech, retail, insurance and financial industries. Oracle relies on partners or the ERP for operations functionality, such as maintenance contract management, invoicing and warranty. OFSC is the go-to-market product, but Oracle EBS also has a field service module for environments where scheduling optimization is not the primary focus. Siebel also offers Siebel Field Service.

STRENGTHS

Product depth: OFSC's self-learning, predictive scheduling engine uses past task completion duration and performance pattern data for each technician, not company averages, to predict durations for future work assigned to those individuals. When combined with its traffic predictions and objectives management, the engine can narrow down arrival windows usually to within one hour.

Implementation: Initial implementation durations of OFSC are shorter than most, and reference customers scored the vendor's partner ecosystem highly.

Platform and integration: OFSC now has an updated UI, support for 18 languages and new connectors for Oracle JD Edwards (JDE), EBS, Service Cloud and NetSuite through Oracle Integration Cloud Service. It also offers RESTful APIs in the Oracle API catalog that SIs can use to build additional integrations. It hosts OFSC primarily in its own data centers.

Viability and ecosystem: As part of Oracle, OFSC is still delivered through partners in most major geographies, and has gained an expanded partner presence in markets such as China, Japan, MEA and India. Gartner estimates that Oracle is adding OFSC customers, half being large enterprises, at a faster pace and in more geographies than before the TOA acquisition.

CAUTIONS

Product breadth: OFSC requires an ERP or other integrated Oracle product to provide full end-to-end FSM capabilities. Organizations that require tracking of detailed equipment work order history, preventative maintenance plans or warranty need to use its extensibility tools and integration templates to link functionality in another application.

Delivery model: Oracle offers OFSC only in a multitenant cloud, so would not be suited to organizations that need an on-premises or private cloud solution.

Upgrades and support: OFSC does not offer customers the option to choose the timing of upgrades. Reference customers scored upgrades and the associated Oracle-provided technical support expertise slightly below average. Oracle is focusing efforts to improve these results.

Competitive software: Although OFSC continues to work with other vendors (e.g., Salesforce, SAP), recent ERP and CRM connector development efforts have largely favored Oracle's own products (e.g., LiveLOOK, JDE, Service Cloud).

OverIT

OverIT has moved up in the Niche Players quadrant based on recent sales execution, geographical expansion and customer experience. It targets many industries and has over 50,000 users, especially in discrete manufacturing, utilities, and oil and gas industries, where its planning, technician enablement, GIS capabilities and GIS integrations are particularly important. We estimate that three-quarters of its new implementations are in EMEA, with the rest in LATAM.

Its Geocall Work Force Management (WFM) product covers end-to-end field service, and extends into planned maintenance, contract entitlement management and GIS, as well as mobile workforce scheduling optimization, enablement and debrief. It can be deployed either on-premises or as SaaS.

STRENGTHS

Product depth: OverIT has the deepest integration with Esri of the products we reviewed, as well as its own stand-alone GIS functionality and integration with other GIS platforms. This is helpful for technicians who benefit from 3D visualizations and the ability to locate underground

infrastructure or hidden equipment components through the Geocall WFM AR module.

R&D: OverIT has built proofs of concept in many areas, such as for the Apple Watch, smart garments for safety location monitoring, virtual reality, and also some that were early to deploy, such as head-mounted display solutions and use of AR across platforms.

Growth and pricing: OverIT has shown consistent growth and profitability over several years and has over 300 employees. It is one of the lowest-priced among comparable feature sets – particularly for implementations for over 1,000 users, but also for smaller deployments.

CAUTIONS

Extensibility and deployments: Creating new fields, forms, workflow and functionality in mobile requires advanced technical skills. While OverIT offers a multitenant cloud solution, many of its existing large customers chose it for its willingness to implement on-premises and to customize. Supporting custom deployments will impact its ability to innovate and offer new functionality.

Geographical coverage and ecosystem: While it has established new partners in North America and APAC, OverIT has not achieved notable sales traction in these regions. It has established several partners during the last year, but other FSM solutions have SI, sales and implementation channels with greater reach and experience.

Integration: Despite customer-specific integration to multiple ERP solutions, OverIT offers standard connectors only for SAP.

Praxedo

Praxedo is a new entrant to the Magic Quadrant and enters as a Niche Player based on increased sales traction and customer base. It focuses on midsize customers in a small number of industries, and more than three-quarters of its customers are in EMEA. Praxedo is self-funded, having been profitable since 2011.

Its products focus on demand management, optimization and technician enablement, as well as work order debrief. It specializes in enabling the many subcontractors that large utilities, telecom and service providers employ, then owning the effort to integrate their individual systems into the enterprise system. It has over 15,000 users in companies ranging from SMBs to large enterprises, primarily in telecom and utility organizations. It also has presence in high tech, oil and gas, retail, and healthcare, among others.

STRENGTHS

Implementation: According to reference customers, average durations for both initial and full-scale implementations were among the shortest of the vendors we reviewed. Streamlined, self-led implementation is evidenced by professional services representing less than 5% of Praxedo's revenue.

Growth: Praxedo has shown reasonable growth in its user base and revenue each year, and is steadily expanding geographically. Companies seeking a vendor with leadership in France or Germany may prefer to work with Praxedo.

Pricing: Praxedo has entry-level pricing tiers available for mobile-only or SMB organizations. These tiers exclude premium capabilities such as "smart scheduling" optimization functions.

CAUTIONS

Geographical coverage: Praxedo is the smallest company we reviewed and, while it does have multiple offices, handles all support out of France. It has no penetration or presence outside of EMEA and North America.

Cost structure: Praxedo commits to carrying the ongoing cost of maintaining the integration from subcontractors to enterprise systems, which presents risk as these systems evolve. If a large enterprise upgrades its ERP and significantly changes the integration, Praxedo may not have sufficient resources (or partners) to support updating the integrations for all that enterprise's subcontractors.

Product breadth: Organizations that require functionality such as contract entitlements, SLAs or invoicing will need an additional integrated solution. Praxedo has some foundational technical structure for objects such as equipment, but these objects are intentionally kept simple.

Retriever Communications

Retriever Communications is again in the Niche Players quadrant based on its industry focus, emphasis on mobile technician enablement, and reliance on integration to back-office systems. It has accumulated \$20 million in funding over several rounds since 2000. We estimate that Retriever has between 5,000 and 7,000 users in APAC, EMEA and North America, primarily in companies that perform electrical maintenance. It also has a presence in oil and gas as well as medical and some industrial manufacturing and service providers.

The primary applications are Retriever Barking and Retriever Mobile. They have functionality primarily for work planning, technician enablement and debrief, along with some operations functionality such as SLAs. Retriever offers several add-on mobile modules and a proprietary mobile app development platform. It also has Retriever FormBuilder for rapid, no-code mobile forms development; Retriever Prepare for back-office, long-cycle service planning; a lone worker application; and an IoT solution.

STRENGTHS

Customer experience and loyalty: Retriever is the only vendor we reviewed that has not lost any customers in the past year, helped by its customer focus and R&D investment in partnership with customers. Reference customers scored their experience, the cost of ownership and overall value among the best of all of the vendors we reviewed.

Hosting options and upgrades: Retriever guarantees all upgrades, to keep its users on the latest version, and a one-hour support response. Customers have the option to have their applications hosted in Amazon Web Services, another infrastructure supplier or on-premises.

Mobile platform: Retriever's mobile apps are designed to enable admins to add workflow, custom forms and reports with no coding. They support Windows 7 through 10, Windows Mobile, iOS and Android, and a local database for technicians to add data or media while offline over an extended period. Retriever has tested its proprietary synchronization engine application under an enterprise-grade load that simulated 100,000 connected mobile users.

CAUTIONS

Product breadth: Retriever's applications do not combine to create a full end-to-end FSM solution. Customers must rely on the ERP and other applications to handle functionality such as contracts, routing, invoicing and analytics. Retriever's customers have often used it as an extensible front-end mobile solution for existing FSM or ERP systems.

Growth: While Retriever's growth has been steady and profitable over the past decade, it remains a small organization relative to most of the qualifying vendors it competes with.

Costs and ecosystem: SaaS costs are higher than average for similar functionality, but include broader support than some competitors. Retriever does not generally use implementation partners, which limits customer choice.

SAP

SAP maintained a position in the Leaders quadrant on the basis of improvements in FSM product breadth and continued sales traction in its scheduling component. SAP's FSM offerings target discrete manufacturing, industrial machinery, utilities and telecom organizations, but can be used in other industries.

SAP released FSM functionality in 2014 within SAP Hybris Cloud for Service (C4S), part of SAP Hybris Cloud for Customer (which also includes sales and marketing capabilities). It now covers end-to-end service, including demand management, mobile, maintenance contracts and invoicing. It has its own scheduling tool but, for automated scheduling optimization, offers either SAP Multiresource Scheduling (MRS), an on-premises add-on to ERP Central Component (SAP ECC), or SAP Workforce Scheduling and Optimization (WSO) by ClickSoftware for complex scheduling. We estimate that C4S has between 3,000 and 5,000 users of mobile field service capabilities, primarily in EMEA or North America, and that MRS has over 80,000 FSM users across all regions.

SAP offers a separate FSM product, SAP CRM Service Manager, for on-premises SAP CRM users. It integrates to either MRS or WSO for scheduling optimization, and to ECC (ERP) for work planning and operations functions. It has its own mobile app.

STRENGTHS

Integration: SAP C4S offers packaged integration to both SAP S/4HANA and ECC for master records, and to ECC for purchasing, pricing and invoicing. C4S also offers IoT integration through the Predictive Maintenance add-on. Purchasing integration from the mobile app is among the strongest we evaluated.

R&D: SAP has made recent investments in C4S, such as for improved contract management and automatic time recording, as well as in enabling technologies, such as a head-mounted display-based app and social collaboration applications.

Ecosystem: SAP has created new templates and programs to improve its extensive development and implementation ecosystems. It also tests, supports and sells third-party applications such as WSO (ClickSoftware) and SAP Knowledge Central by MindTouch.

Product breadth: SAP C4S covers end-to-end field service and can provide functions such as installed base and maintenance contracts stand-alone, or use out-of-the-box integration flows to leverage similar functionality in the on-premises ERP (ECC).

CAUTIONS

Product transition: SAP C4S is still new and has the fewest number of reference customers of the vendors we reviewed. Managing technical and commercial efforts to transition customers to C4S will distract SAP from delivering new FSM capabilities.

Product overlap: SAP offers competing solutions for scheduling, work order management and ERP integration. Organizations should look to partners or internally to fill spaces in functionality or integration.

Integration: SAP could not demonstrate any FSM customers that have integrated to another ERP. Reference customer satisfaction with the partner ecosystem was average, so customers attempting to integrate C4S to another ERP or CRM may face challenges in finding a partner.

Product depth: SAP MRS is designed to handle broad scheduling requirements, such as internal resources and large projects in addition to field service, and is not as deep as its competitor offerings in field service use cases. SAP has not yet invested in updating it to the Fiori UI or in building cloud-based route optimization.

ServiceMax

ServiceMax is again positioned in the Leaders quadrant because of its breadth and depth of product functionality, broad vision, customer results, and expansions. We estimate that it has between 140,000 and 180,000 users across several industries, particularly in industrial and process manufacturing as well as medical device, high-tech and equipment services. We estimate that three-quarters of its new implementations are in North America and that the remainder are primarily in EMEA, but also in APAC and LATAM. ServiceMax raised \$82 million in 2015, bringing its total funding to \$204 million.

ServiceMax addresses all major field service competencies, including those that are lacking in many other solutions, such as predictive maintenance and SLAs, mobile technician enablement, and depot maintenance. It can accommodate moderate scheduling optimization with its OptiMax product and complex optimization through partnership. While still offering native iOS apps, ServiceMax is moving its mobile architecture to hybrid apps using the Apache Cordova container with HTML5 and the Sencha UI framework.

STRENGTHS

Ecosystem: ServiceMax is using some of its funding to invest in R&D initiatives and expansion into new geographies. It has developed SI and large implementation partner relationships across North America and EMEA, and seen recent growth in APAC.

Customer success: Several of ServiceMax's very large customers have expanded their deployments into new geographies, entities and product lines, strongly indicating positive results for initial deployments. It is able to demonstrate significant business improvements across many key indicators among its reference customers and overall customer base.

Market understanding: ServiceMax provides industry-specific implementation templates and a proprietary preimplementation maturity assessment process. It received high scores from reference customers for market strategy and ROI.

Platform and R&D: Examples of recent technology investments include its multiple live IoT deployments and pilot AR projects in partnership with PTC. ServiceMax customers benefit from the scalability, security certifications and development tools of the underlying Salesforce platform.

CAUTIONS

Competition: ServiceMax is one of multiple competing vendors offering integrated FSM on the Salesforce platform, including a new entry from Salesforce itself through a partnership with ClickSoftware. ERP and CRM vendors including SAP, Oracle and Microsoft have continued to acquire and develop their own solutions, and most FSM vendors offer connectors for Salesforce.

Implementation length: Despite recent improvements, ServiceMax reference customers from past projects indicated that its implementation lengths were longer than average for end-to-end solutions.

Product transition: The move to a hybrid mobile client architecture has been two years in the making. The continued sales and support of native iOS and Android apps during this transition could strain ServiceMax's resources for developing and supporting mobile offerings.

Price: Despite a recent price reduction, the total ServiceMax solution is higher-priced than competing solutions. This is partly because the license cost covers the required foundational Salesforce components (such as cloud infrastructure, reporting and social), which provide limited benefit for customers that already have these capabilities in other software.

ServicePower

ServicePower is a public company listed on the London Stock Exchange. It is positioned as a Visionary on the basis of expansions to the breadth of its FSM coverage, improvements to its scheduling optimization, IoT enablement and third-party service provider management.

It has well over 400,000 users, approximately three-quarters of which are third-party service providers that actively receive work from job providers through ServicePower's ServiceOperations suite, but use manual processes or integrate third-party applications for daily activities such as technician scheduling or mobile. ServicePower has customers across many verticals in North America, LATAM, APAC and EMEA. Most of its large customers are in manufacturing, insurance and telecom/utilities, and smaller numbers are in oil and gas, facilities management, capital equipment, sales provisioning, and medical equipment.

ServicePower Unity includes schedule and route optimization – real time or on demand (launched in 2015); ServiceOperations Dispatch and Claims (launched in 2004) for managing and dispatching third-party service providers, managing warranty claims and adjudicating requests for payment; and Nexus FS (launched in 2015) for demand management and planning, inventory management, mobile technician enablement, and social-enabled analytics. ServicePower also has offerings for IoT-enabled predictive maintenance with automated scheduling.

STRENGTHS

R&D: ServicePower has new capabilities in areas such as long cycle service, crew scheduling, inventory and asset management. It has Optimization on Demand SaaS-based scheduling and a Quantum Annealing scheduling optimization algorithm. Components can be bought independently, and all ServicePower functionality accessed through documented RESTful APIs.

Third-party service: ServicePower uses rule-based logic to dispatch either employed or external resources within ServiceOperations for organizations that use third-party service workforces. ServicePower maintains a service provider network as well as functionality such as warranty claims processing and work order data flow between organizations.

Customer experience: Reference customers scored ServicePower among the highest for customer experience of the vendors we reviewed. It has a high customer retention rate overall.

CAUTIONS

Growth: While ServicePower grew revenue in the year to March 2016, particularly in SaaS licenses, growth as a percentage lagged those of its competitors in this Magic Quadrant. As it ramps up its new products and partners, ServicePower expects growth to accelerate.

Product transition: While already deployed in some large organizations, Nexus FS and Optimization on Demand are new and do not yet have the level of product depth or globalization support that some large field service organizations need. ServiceScheduling (on-premises) and ServiceOperations (multitenant) remain the most used by ServicePower's large-enterprise customers.

Product portfolio: ServicePower has four back-end code bases and some functionality overlap. Maintaining support for customers using all of the products will constrain its ability to accelerate its roadmap and delivery while it migrates to a unified platform and code base.

Verisae

Verisae is a new entrant to the Niche Players quadrant this year on the basis of its focus and level of traction in the retail/grocery and utilities industries, along with some telecom, facilities management and equipment service providers. Since Verisae acquired ViryaNet in 2014, it has refactored the ViryaNet capabilities into its traditional cloud-only solutions and now offers the same product either in the cloud or on-premises. Over 60,000 users including subcontractors use its vx Field and vx Maintain products. We estimate that two-thirds of its new implementations are in North America, with the rest primarily in EMEA.

Together, vs Field and vx Maintain cover end-to-end field service, including demand management and IoT enablement, optimization, work planning, technician enablement and debrief, contract entitlement, and returns management. Verisae also has independent IoT products (vx Sustain, vx Conserve and vx Observe) that support IoT capabilities such as equipment resource, energy usage and alarms management for over 250,000 assets.

Accruent announced its acquisition of Verisae in September 2016, which was after the evaluation period for this Magic Quadrant. As such, Verisae has been evaluated independently.

STRENGTHS

SaaS growth: Verisae has transitioned from deployment via SaaS approximately half the time to deployment via SaaS nearly all of the time. It is in the process of adding an office in Germany and expanding its partner base.

Third-party service: Verisae work order marshalling and service brokering help manage information transfer between general and subcontractor organizations, including rules of engagement, the work order, quoting and invoicing. Verisae is also working on functions that would integrate subcontractor- or other group-level capacity into scheduling optimization.

R&D: Verisae has a strict release planning and launch process, and aligns its upcoming release content for the next 36 months with its business strategy. It nonetheless maintains enough flexibility to react to market forces and opportunities. This strategy prioritizes extensibility and customer collaboration. Reference customers indicated a low level of difficulty for integration.

CAUTIONS

Customer experience: Reference customers indicated implementation lengths that were among the longest for both initial and full-scale deployments of all the end-to-end field service solutions that qualified. Verisae scored lower than these solutions on technical support, upgrades and vendor relationship.

Reporting: Verisae moved to Cognos as its reporting engine, starting with cloud deployments. While it has added dashboard tiles with drill-down to supporting data, it is still transitioning many of its reports that are currently available only to on-premises customers. Reference customers indicate that reporting out of the system is limited.

Pricing: Verisae offers add-on per-user pricing for its optimization, parts and inventory, mobile, and performance management functionality. The total list price becomes one of the most expensive of those we reviewed. It also has a site license fee for its warehouse inventory management.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

Comarch

Coresystems

FieldAware

Praxedo

Verisae

Dropped

Infor – Does not have a product that meets the updated inclusion requirements.

PTC – De-emphasized its field service capabilities and often partners with other vendors for field service functions.

TOA Technologies – Acquired by Oracle and is now evaluated as part of Oracle. (The Oracle profile also combines Oracle [E-Business Suite] and Oracle [Siebel], which were separate profiles in the previous Magic Quadrant.)

Vertical Solutions – Does not have a product that meets the updated inclusion requirements.

WennSoft (now renamed as KEY2ACT) – Does not have a product that meets the updated inclusion requirements.

Honorable Mentions

The following vendors were not included in this year's Magic Quadrant, typically due to their single-industry or geographical focus, low number of new deployments, or time in the market. However, they still offer value and/or unique functionality in the markets they address. These include (but are not limited to):

ABB, Arris, CGI, Clevest, Fast Lean Smart (FLS), Geoconcept, Infor, KEY2ACT (formerly WennSoft), mplsystems, Salesforce, Trimble and Vertical Solutions.

Inclusion and Exclusion Criteria

Inclusion criteria are used to determine which vendors will be covered in this research.

1. Market Presence and Momentum

Factors that affect our evaluation are the presence that a vendor has in the market, and the observed momentum of its growth. A vendor with stagnant sales or an ineffectual marketing organization should concern prospective buyers. Gartner's criteria specify that vendors:

Have new customer references as follows:

Five new FSM customers during the past four quarters in at least two of the following geographic markets: North America, South America, Latin America, EMEA and APAC.

Two FSM customers with more than 100 technicians in production over six months that use the latest major version of the software with integration to system(s) of record.

Have at least \$6 million in new FSM software license, maintenance and support revenue (excludes professional services) recognized, per financial accounting standards, during the past four fiscal quarters. The following must be well-represented and supported:

Large or midsize businesses (average deal size above 100 mobile technicians).

Two major geographical markets (North America, EMEA, APAC, LATAM and South America).

Two industries (utilities, telecom, high tech, oil and gas, manufacturing, aerospace and defense, automotive, financial services and insurance, chemicals, medical devices, healthcare, etc.).

Are recognized by the market, as evidenced by regular appearance on client shortlists and at tradeshows as well as references from other vendors as competition.

Provide thought leadership, which gets adopted by customers in live operations, through webinars, published market-related white papers, blog articles and user communities.

2. Short-Term Viability

The vendors should:

Have sufficient cash to fund 12 months of operations at the current burn rate.

Have sufficient professional services to fulfill customer demands during the next 12 months.

Have a practice and ecosystem with sufficient third-party consulting and integration firms to grow at a double-digit pace for two years.

Demonstrate a pipeline of prospects and an adequate sales team to drive new business.

Provide evidence that they will equal or exceed the previous four quarters of business results in the upcoming four quarters.

Evaluation Criteria

Ability to Execute

Product/Service

This includes current product/service capabilities, quality, feature sets and skills defined in the market definition and detailed in the subcriteria, whether offered natively or through OEM agreements/partnerships.

Vendors that support a wide range of functionality or high degree of depth of functionality and complexity have greater market potential and are rated accordingly. This is a cross-industry Magic Quadrant, therefore, the evaluation of a provider's offering is focused on the provider's ability to serve several distinct industry sectors, as well as on the ability to provide intuitive, industry-specific templates.

To score highest, the vendor will offer customers a choice of deployment models, including on-premises, "private cloud" hosted and multitenant SaaS, with SaaS receiving the highest weighting.

Overall Viability (Business Unit, Financial, Strategy and Organization)

Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product, and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing

Sales execution includes vendor capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Pricing includes vendor flexibility in supporting multiple pricing scenarios, such as perpetual licensed, hosted, SaaS and business process outsourcing.

Market Responsiveness and Track Record

This considers vendors' ability to respond, be nimble and achieve competitive success as opportunities develop, competitors act, requirements evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution

This considers the clarity, quality, creativity and efficacy of vendor programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience

This considers relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, SLAs and so on.

Operations

Operations is the ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product or Service	High
Overall Viability	Medium
Sales Execution/Pricing	High
Market Responsiveness/Record	Medium
Marketing Execution	High
Customer Experience	High
Operations	Medium

Source: Gartner (November 2016)

Completeness of Vision

Market Understanding

This criterion considers vendors' ability to understand buyers' requirements and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance them with their added vision.

The vendor should demonstrate strategic actions around partnership opportunities and trends in the market. Examples include:

- The shift from product to service
- Mobile social engagement
- Mobile supervisors and customers
- Multitenant SaaS
- Real-time analytics
- Third-party service and contingent workforces
- Integration to ERP, CRM and GIS players

New application functionality – for example, IoT enablement, customizable workflows and mobile forms, on-site photo or video capture, wearables, labor planning tools and field knowledge management

The vendor strategies should address ongoing vendor market dynamics, such as venture funding, "coopetition," consolidation and vertical industry requirements.

Marketing Strategy

This considers whether vendors have a clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

We look at whether vendors have a well-articulated strategy for revenue growth and a sustained opportunity for profitability. Key elements of the strategy include a sales and distribution plan, internal investment priority and timing, and partner alliances. A Leader will move a market by offering users proven best practices, templates and samples by industry. Customers should continue to grow their solutions via a range of modular choices (at varying price points) that do not lock them into a platform decision.

Sales Strategy

This considers vendor strategies for selling products, including whether it uses a well-respected network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base. These organizations should achieve success for a significant percentage of the vendor's business.

Offering (Product) Strategy

This considers vendor approaches to product development and delivery, including whether it emphasizes differentiation, functionality, methodology and feature sets as it maps to current and future requirements.

The successful vendor here openly communicates to its customers and to Gartner a "statement of direction" for its next two product releases that keeps pace with or surpasses Gartner's vision of the FSM market. The vendor understands major technology/architecture shifts in the market and communicates a plan to leverage them and address customer migration needs.

Business Model

The soundness and logic of vendors' underlying business proposition can determine the degree of success. Sales channel and partnership strategies for implementation, integration, training and support are important components.

Vertical/Industry Strategy

Vendor strategies to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets, are considered here. A provider must have sufficient diversification to ensure a continuous revenue stream and drive best practices across industries, while still investing the appropriate focus and expertise in strategic industries to ensure the product can be part of the evaluation process.

Innovation

This considers direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes. Vendor innovation should demonstrate synchronization with market understanding and strategy above.

Geographic Strategy

This considers vendor strategies to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.

The depth of partnerships should be visible through joint implementations, integration certification, professional certification, pricing and deployment options, in addition to easy-to-follow written programs.

Table 2. Completeness of Vision Evaluation Criteria Weightings

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	Low

Source: Gartner (November 2016)

Quadrant Descriptions

Leaders

Leaders have a robust scheduling engine that is scalable to thousands of technicians, and they demonstrate a market-defining vision of how technology can help service professionals achieve business objectives. Leaders have the ability to execute against that vision through products, services and solid business results in the form of revenue and earnings.

Leaders have significant, successful customer deployments in North America, EMEA and Asia/Pacific in a wide variety of vertical industries, with multiple proof points above 1,000 users. Other providers in the market measure themselves against the Leaders and emulate or copy their

strategies and tactics. Leaders demonstrate market strength based on installed base depth, and they affect market trends in all categories for the criteria by which they're evaluated. Leaders' software users feel they are gaining a competitive advantage over others in their industry.

Challengers

Challengers are often larger than most (but not all) Niche Players, and demonstrate a higher volume of business to new or existing customers. Typically, Challengers have the size to compete worldwide; however, in some cases, they may not be able to execute equally well in all geographies. They understand the evolving needs of a service organization, yet may not lead customers into new functional areas with their strong functional vision. Challengers tend to have a good technology vision for architecture and other IT organizational considerations, but they may not have won over their customers' service directors.

Challengers often have a strong market presence in other application areas (such as parts and asset management, finance, and order management), but either haven't demonstrated a clear understanding of the FSM market's direction (which is more end-to-end process-based), or are not well-positioned to capitalize on emerging trends, which can often be a factor of the delivery model.

Visionaries

Visionaries display technology or business model innovation, including the evolution from physical to digital business, and may influence or will soon influence the direction of the FSM market. Visionaries typically are limited in execution or demonstrated track records. In general, their products and market presence aren't complete or established enough to challenge the leading vendors.

Niche Players

Niche Players offer products for field service, but they may lack some functional components, not show the ability to consistently handle deployments of more than 1,000 field technicians across multiple geographies, or lack strong business execution in the market. Niche Players may offer complete portfolios for a specific vertical industry, but they face challenges in one or more important areas to support cross-industry requirements, such as complex forecasting. They may have an inconsistent implementation track record, or lack the ability to support large-enterprise requirements.

Despite the issues described, Niche Players, in many cases, can offer the best solutions to meet the needs of particular service organizations, considering the price-to-value ratio for those solutions.

Context

Vendors included in this Magic Quadrant have demonstrated their ability to provide licensed, SaaS or multiple delivery options that support field service for enterprise customers across a range of industries. Some provide narrower, but deep, field service scheduling applications, whereas others provide broader service suites. In many cases, a service organization must evaluate not only a vendor's suite of product offerings, but also the ecosystem of providers that can fill in the functional white space of capabilities that the considered vendor may not offer.

Magic Quadrant analysis represents conditions at a specific point in time. To be consistent and complete in the analysis, Gartner stops all data collection after a cutoff date. The cutoff date for this Magic Quadrant was June 2016.

This Magic Quadrant evaluates many field service vendors in the market, but is not intended to be an exhaustive list of all possible vendors, solutions or products. The Magic Quadrant is a valuable tool to assess and compare multiple solutions and vendors; however, clients are encouraged to develop a clear understanding of their own objectives and requirements, and to use the Magic Quadrant in conjunction with inquiries with Gartner analysts.

Vendors we evaluated generally fell into one of the categories below:

End-to-end FSM without ERP

Characteristics: Provides coverage for all categories, but not all components are necessarily best in class. An integration to ERP and/or other CRM is required.

Example vendors: IFS (IFS Field Service Management, IFS Mobile Workforce Management), ServiceMax (FSM and OptiMax)

ERP or CRM vendor with recent entrant

Characteristics: A large ERP or CRM vendor that recently acquired a vendor or created a new product to improve FSM product breadth or depth as compared to end-to-end vendors. Office functions are often housed in an application deployed on-premises.

Example vendors: Microsoft (acquired FieldOne Systems, now part of Dynamics CRM), Oracle (acquired TOA Technologies, now Oracle Field Service Cloud), SAP (created SAP Hybris Cloud for Service)

Best-of-breed scheduling optimization and mobile, new in other categories

Characteristics: The product has deep automated scheduling optimization, routing and forecasting, and mobile technician enablement capabilities, but also has newer offerings that cover most other categories.

Example vendors: ClickSoftware, ServicePower

Broad product functionality with execution constraints

Characteristics: The product covers all or most functionality categories, but execution in some areas (e.g., geographical coverage, partnerships, marketing, sales) is limited or inconsistent as compared to end-to-end leaders.

Example vendors: Astea International, OverIT, Verisae

Field-mobility-focused solutions or application frameworks

Characteristics: The product's deepest functionality is in mobile technician enablement or RMAD for organizations that want to leave their back-end systems unchanged. The vendor also has offerings for other categories.

Example vendors: Coresystems (mobile technician enablement), FieldAware (mobile technician enablement), Retriever Communications (mobile, RMAD)

Focused on a specific industry or use case

Characteristics: The vendor has a unique offering focused on a specific industry or use case.

Example vendors: Praxedo (subcontractors for large telecom and utility organizations), Comarch (telecom, insurance)

Market Overview

Software sales in the FSM market can only be approximated, because privately held vendors and some ERP vendors do not disclose software sales in this area. Gartner research estimates the revenue for packaged field service dispatch and workforce management software applications – including maintenance and service revenue – at approximately \$1.7 billion annually. While there have been some acquisitions, the market for FSM tools remains highly fragmented, with new entrants appearing regularly.

Of note in this Magic Quadrant is that there were no vendors in the Challengers quadrant. Oracle had products in that quadrant in the previous Magic Quadrant, but its products have now consolidated under one profile in the Leaders quadrant. There are vendors moving in this direction, but no vendor has risen to the level of global execution to meet the definition of a Challenger yet.

We analyzed responses from 129 reference customers who participated in the online survey, a subset of whom also participated in telephone interviews. These customers were reference customers provided by 23 vendors that participated in this research. Some of the insights we gained include:

Adoption of off-the-shelf FSM mobile apps: Earlier adopters of mobile solutions have shared their ROI results and are driving adoption of mobile in smaller organizations. Also, improved capabilities to extend mobile apps by adding new forms and workflows without the need for any coding are enabling more organizations to configure off-the-shelf FSM mobile solutions to meet their needs, as opposed to creating entirely "homegrown" (internally developed) solutions. Among the customers we surveyed, 74% indicated they are using or plan to use the vendor's latest mobile app within 12 months, up from 60% in 2014. Only 16% indicated that they will build a custom solution, down from 21% in 2014.

Multitenant SaaS: Cloud adoption among new deployments has increased by over 65% from 2014, and now more than 38% are being deployed in a multitenant "public" cloud (up from 23% in 2014). These organizations had the software installed on-premises 41% of the time, down from 57% in 2014. Approximately 20% hosted in a private cloud by the vendor or a third party. Gartner predicts growth in actual spend on public cloud services to continue to increase through 2020 at a 16.4% CAGR (see "Forecast: Public Cloud Services, Worldwide, 2014-2020, 3Q16 Update").

IoT enablement: Almost all of the vendors we reviewed have some IoT enablement functionality available, but we found there to be a wide range of level of depth. For some, it is the ability to integrate a work order through an API; for others, it is full configurability and programmability. Most of the customers currently using IoT capabilities are in large organizations, in industries such as utilities, manufacturing, telecom or high tech.

Wearables: Several vendors have built proofs of concept around wearables. It is early days for these solutions, but several indicate that their customers are starting to align their organizations. Change management and goal alignment are key parts of this, even before

evaluating vendors (see "The First Three Steps in Evaluation the Role of Head-Mounted Displays for Field Service").

Reasons for selecting vendor: The most important specific functions cited as the top three reasons for selecting a vendor were the vendor's mobile app, ERP integration and ability to support complex scheduling problems. References ranked these in the top three most important reasons 38%, 24% and 22% of the time, respectively. More broadly, reasons pertaining to overall breadth of functionality and the vendor's viability, reputation, service and support were in the top three 36% and 30% of the time, respectively.

Implementation duration: Average implementation durations were from two to 13 months for the initial deployment and from two to 20 months to reach full deployment across all geographies and divisions, with an average of seven and 10 months, respectively.

ROI: Approximately 54% of respondents created an ROI model to gauge the financial impact achieved from the project. Of those, approximately 60% indicated they had already achieved their intended ROI, after an average time of 12 months. When asked to share all factors that contributed to the achievement, 71% cited improved technician utilization, 60% cited improved customer satisfaction, 52% dispatcher efficiency and 43% increased service profitability.

Most used functions: The most commonly used functions were automated scheduling optimization (50%), work order management (49%), mobile work order debrief (47%) and GPS or GIS integration (45%). For mobile, the most commonly used devices were Android (43%) or iPhones (40%), with consumer-grade tablets used by approximately one in four respondents.

Acronym Key and Glossary Terms

MRO	maintenance, repair, operations
RMAD	rapid mobile app development
SI	system integrator
SLA	service-level agreement

Evidence

Reference customer online survey – 129 customer responses from 23 vendors (reference customer contacts were provided by the vendors)

Vendor survey and briefings – All vendors

Note 1

Reference Sample Size

Some strengths and cautions above refer to reference customer scoring. Reference customers for an online survey were provided by the vendors, but were required to meet the criteria specified in the inclusion criteria section. While some vendors had 10 references participate in the survey, the average number per vendor was six, which is a relatively small sample size. Gartner analysts also received feedback from other customers through the inquiry process, public sources and other analysts.

Note 2

Users Versus Customers

To simplify comparison across vendors with widely varying average user counts per customer, the vendor ratings above refer to aggregate user counts instead of customer counts. For example, a vendor with 20 *customers*, each of whom had purchased 600 *user* licenses, would be noted to have 12,000 users in its customer base, as would a vendor with 120 *customers*, each of whom had purchased 100 *users*.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added

vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

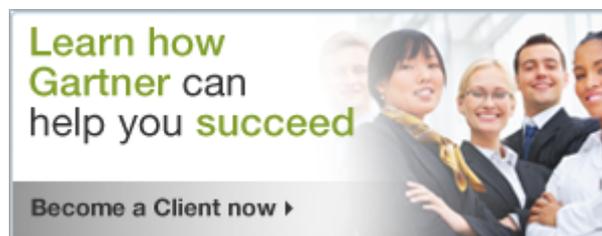
Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.



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