Magic Quadrant for Field Service Management

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Vendors' positions in this Magic Quadrant reflect customers' new expectations in areas such as digital technician support, outcome-based service business models, and AI-driven scheduling and decision support. When assessing vendors, look for packaging of multiple technologies and proven results.

Strategic Planning Assumptions

In 2022, over 50% of field service providers will offer a specialized digital customer experience that enables two-way interaction and workflow initiation via multiple human and nonhuman channels.

In 2022, more than 60% of asset manufacturers will offer outcome-based service contracts, up from less than 15% in 2018.

In 2022, only 30% of field service providers will be ready to deploy AI-based decision support in their field service management platforms in order to compete better, despite robust capabilities being available by then.

Market Definition/Description

This document was revised on 17 April 2019. The document you are viewing is the corrected version. For more information, see the Corrections (http://www.gartner.com/technology/about/policies/current_corrections.jsp) page on gartner.com.

Field service management (FSM) is a discrete market within the broader customer service and support software market. Field service providers (FSPs) typically dispatch technicians to remote locations to provide installation, repair or maintenance services for equipment or systems. They may manage, maintain and monitor these assets under a predefined service or maintenance contract.

FSM applications provide capabilities to:

- **Manage demand:** They handle the receipt of work requests from external sources, such as customers (through multiple channels), Internet of Things (IoT) connections and service-brokering networks. They also import work requests from internal systems, such as ticketing, maintenance, repair and operations (MRO), product life cycle management, long-cycle project management and enterprise asset management systems.

- **Plan work:** They offer workload balancing, forecasting of shift requirements, schedule optimization for short- and long-cycle work requests, SLAs and cost prioritization, parts demand planning and purchasing, contracted or contingent third-party service provider enablement, customer approval coordination, and geographical information system (GIS)-based planning.

- **Inform and enable technicians:** They do this via apps on mobile and wearable devices for GPS tracking, telematics, equipment work history, service collaboration, customer communication, knowledge management integration and work instruction management, inspections, safety forms, parts sourcing and customer quoting. Organizations provide support for technicians and customers in the field through digital service support channels such as remote video and augmented reality-based communications, IoT visualizations and chatbots.

- **Debrief work orders:** They enable online or offline mobile collection of time and parts used, tasks completed, updates to equipment records, site evidence, customer recommendations, sign-offs, approvals for additional work and satisfaction surveys.

- **Perform analysis and integration:** They do this using field service performance management reports and dashboards, predictive analytics, alerts and notifications, and APIs and connectors for ERP, CRM and GIS application integration.
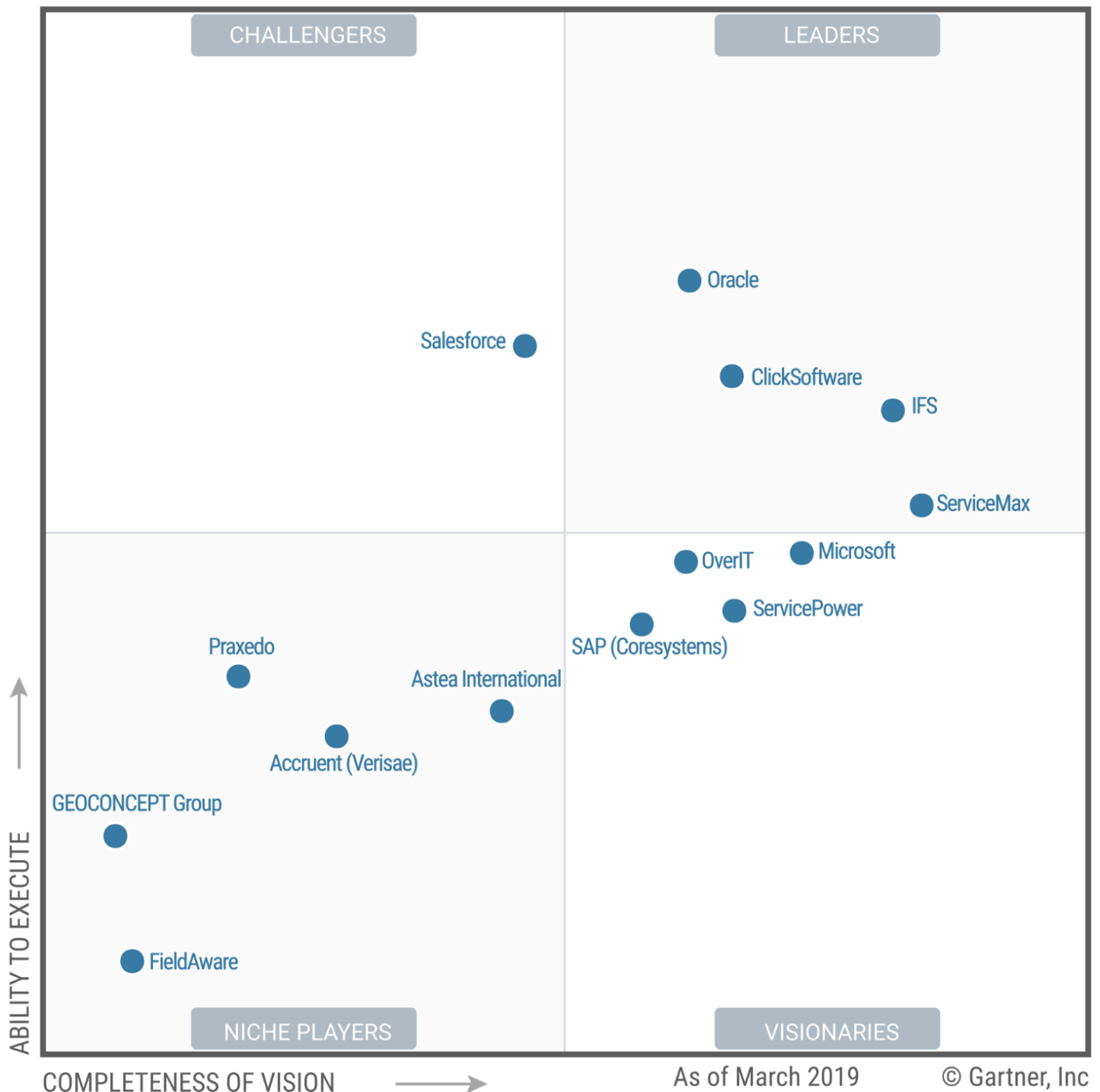
Organizations that handle complex service use cases for mission-critical equipment, provide both on-site and in-depot service, or have FSM-driven pricing, end-to-end FSM applications should also:

- **Manage additional operations:** They should handle 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 pro forma invoice preparation.

FSM products operate across multiple communication channels: websites, supply chain solutions, third-party service-brokering solutions and analytics. FSM applications draw on software in various markets, such as CRM, ERP, enterprise asset management, asset performance management, IoT, workforce management, vendor management, product life cycle management and supply chain markets (specific examples of the last being transportation management and fleet management). Although several FSM vendors have capabilities in these areas, they are not their focus. Some vendors also offer industry-specific functionality or even industry-specific products; however, this is a cross-industry Magic Quadrant for which qualifying vendors had to have successful deployments in multiple industries for the products we reviewed.

Magic Quadrant

Figure 1. Magic Quadrant for Field Service Management

CHALLENGERS | LEADERS

Oracle

Salesforce

ClickSoftware

IFS

ServiceMax

OverIT   Microsoft

ServicePower

SAP (Coresystems)

Praxedo

Astea International

Accruent (Verisae)

GEOCONCEPT Group

FieldAware

NICHE PLAYERS | VISIONARIES

ABILITY TO EXECUTE

COMPLETENESS OF VISION →   As of March 2019   © Gartner, Inc

Source: Gartner (April 2019)

Vendor Strengths and Cautions

Accruent (Verisae)

Accruent (https://www.accruent.com/) , which is headquartered in the U.S., is a Niche Player on the basis of its broad product functionality and high customer experience (CX) scores, but relatively narrow industry and software alliance strategies.

Accruent is best suited to organizations that use subcontractors and need scheduling optimization, but provide services complex enough for scheduling exceptions to be handled best when dispatchers use machine-learning-based suggestions to augment human analysis. Recent enhancements include a customer portal with survey, technician-tracking and self-scheduling capability and strengthened agreement management functionality. Accruent has also added a simulator for labor forecasting and improved its handling of scheduling for crews, long-cycle work and multiple groups independently. Accruent's field service offering is delivered either independently through its vx Field product, or optionally by adding its vx Maintain (for planned maintenance) and/or vx Observe (IoT) products.

Accruent targets several industries, but most of the approximately 65,000 users of vx Field and vx Maintain are in the retail, utilities and telecom sectors.

Strengths

- **Product breadth:** By combining the three vx products plus mobile capabilities, Accruent offers a solution that covers most categories of FSM functionality. For example, it covers often-overlooked areas such as IoT connectivity, subcontractor management, artificial intelligence (AI)-informed scheduling optimization and long-cycle service.

- **Integrations and industry strategy:** Although Accruent does not offer packaged ERP and CRM integrations, several manufacturers are certified to integrate with its connected IoT field service capability. They include Danfoss, Emerson, KE2 Therm, Powerhouse Dynamics and Siemens. Accruent also offers specialized industry functionality, such as the ability to control third-party access to telecom locations and retail inventory management.

- **Overall ROI and support:** Scores from surveyed reference customers for Accruent put it in the top third of vendors in this Magic Quadrant for time to achieve ROI, support quality and user community.

Cautions

- **Implementation scalability:** Accruent has a small professional services team dedicated to field service, and only a few partners that regularly implement its offerings. Despite the product's configurability by division and geographic area, staffing may present challenges to organizations aiming to conduct simultaneous rollouts across the world.

- **Product transition and upgrades:** Adoption of Accruent's SaaS deployment option is low, compared with that of Accruent's competitors in this Magic Quadrant. Additionally, reference customers' scores put Accruent in the bottom third for upgrades.

- **Marketing strategy:** In 2016, when Accruent acquired Verisae, it highlighted Verisae's strengths as an IoT software provider, which it sought to incorporate into its larger product lines centered on real-estate management. As such, Accruent is not well known as an FSM provider and does not have deep alliances that complement its FSM offerings. Also, monitoring of customer-owned equipment requires the purchase of an additional module, vx Observe, which must be deployed in the network of the owner or operator.

Astea International

Astea International (https://astea.com/) , which is headquartered in the U.S., is a Niche Player on the basis of its broad and deep product functionality and strong customer retention, but primarily direct sales and implementation approach, which utilizes few partners.

Astea often markets its flagship product, Astea Alliance, at organizations with complex or unique use cases that want to minimize integration effort, licensing costs, and reliance on ERP, CRM and other applications by sourcing these from a single vendor. Astea Alliance includes FSM-technician-tailored functionality in areas beyond our definition of FSM, such as project management, customer service, opportunity management and inventory management. Discrete manufacturers, IT service providers, specialty service providers and high-tech manufacturers represent the largest portions of its broad customer base, which has grown to over 200,000 users.

Astea has expanded its development partnerships to extend its access to expertise in areas such as IoT-connected service, remote video support and subcontractor sourcing management. It has also extended its already strong capabilities for handling complex work, subcontractors, and managing parts and warehouses via mobile apps.

Strengths

- **Product depth:** Customers with parts-intensive use cases can use capabilities such as autosourcing of low-cost replacement parts "on the fly," management of in-transit orders and complex quoting. Astea's contingent-worker portal handles cost and bid management, offers a subcontractor mobile app and connects to third-party service provider networks. It has also been deployed with partners for remote video support and IoT-driven predictive maintenance.

- **Customer loyalty:** Astea has one of the highest customer retention rates of the vendors in this Magic Quadrant, according to responses to our vendor survey. Among other things, customers praise its product's depth and the ability to configure a single instance to support multiple use cases.

- **Experience and regionally optimized product management:** Founded in 1979, Astea is the longest-serving FSM vendor and has large long-standing deployments in Asia/Pacific, Japan, EMEA and North America.

Cautions

- **Integration:** Astea customers with whom Gartner has dealings indicate challenges with integration to ERP, CRM and other systems. Astea is improving its APIs to help customers integrate with what is a broad and deep product, but they remain limited, compared with those of its competitors in this Magic Quadrant.

- **Implementation CX:** Astea performs most of its implementations directly, but customers indicate that implementation times could be shortened by improving upfront training to reduce configuration rework. Scores from Astea's reference customers for technical implementation, customization and tools were among the lowest in this Magic Quadrant.

- **Cost:** Satisfaction scores from Astea's reference customers for new implementations were among the lowest in this Magic Quadrant for cost categories including support, software and maintenance, and overall cost.

ClickSoftware

ClickSoftware (https://www.clicksoftware.com/) , which is headquartered in the in U.S., is a Leader on the basis of the depth of its functionality in its target areas, its industry strategy and the size of its customer base.

ClickSoftware has significant numbers of customers in more than 10 industries, a large percentage of which are utility, telecom and discrete-manufacturing organizations. We estimate that its midsize and large organization users number over 650,000. It is best suited to organizations with

use cases that require complex automated schedule optimization and mobile capabilities and that utilize both employee and third-party workforces.

A significant percentage, but not yet the majority, of the company's ClickSchedule (on-premises) customers have migrated to the cloud Field Service Edge (FSE) product since its release in 2015.

Strengths

- **Market responsiveness:** Scores from ClickSoftware's reference customers for product upgrades and enhancements were higher than those for any other vendor in this Magic Quadrant. ClickSoftware has responded to the growing urgency for FSPs to improve the CX through transparency and personalization and to utilize hybrid workforces (employees and subcontractors). It has expanded its customer engagement capabilities. It also offers services that help FSPs improve their scheduling optimization configuration.

- **Product innovation:** ClickSoftware has incorporated real-time traffic patterns and AI-based task duration prediction into its scalable scheduling engine. It also uses deep neural networks and machine learning to offer users graphical "what if?" analysis capabilities that help democratize its functionality by making it accessible to less technically sophisticated organizations.

- **Industry strategy:** ClickSoftware includes functionality that supports long-cycle service, work process complexity, and dynamic crew assembly and management. It offers a cross-industry configuration template and augments this for the telecom, energy/utilities, and oil and gas industries. Of the vendors in this Magic Quadrant, it has the largest base of users to influence its roadmap.

- **Sales strategy:** ClickSoftware offers its products through multiple channels — it sells FSE both directly and through partnerships with companies such as SAP, ServiceBench and global system integrators. It also has a co-development partnership with Salesforce for components of Salesforce Field Service Lightning. Other technology partnerships broaden its offering in areas such as IoT visualization, augmented-reality-based technician support and knowledge management.

Cautions

- **CX:** Reference customers for ClickSoftware gave it the second-lowest overall score of any vendor in this Magic Quadrant for technical support, end-user training and availability of quality third-party resources. Some indicated that ClickSoftware focuses too much on product functionality and increasing the number of user licenses, and not enough on assisting with change management and educating implementation and support staff.

- **Implementation:** Despite many ClickSoftware customers having integrated dozens of systems and the company's long-standing relationships with system integrators, some customers identify a need for further enhancement of its out-of-the-box connectors and education about FSE architecture. ClickSoftware expects its new partnership with Cloud Elements to help address this need.

- **Product breadth:** Organizations with complex mobile workflow, parts management and planned maintenance needs may require additional product integrations.

- **Product transition and partners:** Click continues to sell its on-premises ClickSchedule product in some regions and for some use cases, and must therefore maintain staff to support it. Implementation partners lead a relatively small percentage of FSE implementations.

FieldAware

FieldAware (https://www.fieldaware.com/) , which is based in U.S., is a Niche Player based on its low implementation cost, broad (but not deep) product coverage and intuitive interface, along with limited geographical coverage and a small ecosystem of implementation partners. FieldAware has improved its FSM product's operational analytics and scheduling optimization capabilities through partnerships and some recent first-party development. It has also improved its data integration capabilities with new tools and APIs.

FieldAware has many customers in several industries. It is best suited to midsize organizations in North America and Western Europe that are looking for a basic, easy-to-implement solution that brings together best-of-breed technologies from multiple providers and provides native integrations with NetSuite ERP and CRM. FieldAware also targets organizations that require some automated scheduling and the abilities to track customer equipment, bill for work and utilize specialized mobile forms.

The company's user base spans industries, including equipment manufacturing, communications and high-tech. But most of its 14,000 users are in service providers (such as mechanical, electrical, plumbing and heating, ventilation air conditioning and refrigeration [HVACR] contractors) and facilities management organizations.

Strengths

- **Implementation and license cost:** FieldAware's product is packaged in such a way that its professional services team can help organizations implement its product quickly. Reference customers for FieldAware have achieved some of the fastest implementations and their scores place it in the top fifth for implementation time and cost. Also, the product's licensing cost is lower than the average for products from vendors in this Magic Quadrant.

- **Reporting:** FieldAware has ported its FieldAware Analytics product to an OEM version of Domo and built out-of-the-box reports and dashboards for areas such as service delivery, labor forecasting and item consumption. Some customers have reported significant improvements in scheduling, billing, technician sales and overall revenue using these reports.

- **Platform and OEMs:** FieldAware provides native integrations with platforms from vendors such as Salesforce and NetSuite, and has connected to several others, but it can also operate independently from them. It resells a robust OEM version of ProntoForms' offering for mobile extensibility and knowledge, uses Amazon Web Services Lambda for connecting other apps, and provides JSON-based APIs for the IoT.

Cautions

- **Growth and operations:** Although FieldAware did register an increase in bookings for the year ended June 2018, its revenue growth was relatively flat. Its reference customers gave its support operations scores among the lowest in this Magic Quadrant.

- **Product depth:** Solutions that use AI for parts prediction, functionality such as long-term workforce planning and forecasting, and native augmented-reality capabilities are either only on FieldAware's roadmap or available solely through professional services projects.

- **Scalability and global partners:** FieldAware uses partners for only a very small portion of its projects, and all its business is done in North America and Western Europe. Many of its customers are small organizations and it has relatively few global system integrators that would offer alternatives to its professional services for connecting its offerings to additional systems.

GEOCONCEPT Group

GEOCONCEPT Group (https://en.geoconcept.com/) , which is headquartered in France, is a Niche Player on the basis of its deep product capabilities in GISs and AI-driven work planning and scheduling, and its need for more product breadth, market strategy and geographical coverage. GEOCONCEPT has enhanced both its intraday scheduling and its long-term planning functionality. It has also improved its CX functionality with a portal for customer self-scheduling and a chatbot to help FSPs' customers find information.

GEOCONCEPT is best suited to organizations with dynamic fluctuations in the geographical concentration of reactive work demand for multiple types of field workers (field sales representatives, delivery technicians and home service technicians, for example).

The customer base for GEOCONCEPT's Opti-Time suite of products covers several industries, but most of its over 150,000 users are concentrated in utilities, home service and retail organizations.

Strengths

- **Product depth:** GEOCONCEPT has embraced AI for, among other things, automatically redrawing "districts" (territories and service areas) based on actual and predicted demand. Opti-Time offers mapping and routing coverage for several regions, including some underserved areas such as China, India and Japan, through integration with providers like HERE, Microsoft (Bing) and NavInfo.

- **Sales strategy and alliances:** GEOCONCEPT has product partnerships with organizations that use its scheduling and forecasting functionality — they include Salesforce and Pitney Bowes in specific regions. It is profitable and has a strong pipeline of opportunities to drive growth.

- **Overall ROI and community:** GEOCONCEPT's reference customers indicated that Opti-Time provides a measurable ROI once implemented. Although reference customers' scores for its direct support were below average for vendors in this Magic Quadrant, their scores for its peer user community were among the best.

Cautions

- **Product breadth:** Customers looking for deep functionality for handling maintenance contract agreements, invoicing and highly configurable mobile workflows will need to integrate GEOCONCEPT's Opti-Time with ERP solutions or other products.

- **Geographical presence:** Although GEOCONCEPT is expanding and has customers in several regions of the world, the vast majority of Opti-Time customers are in France and Switzerland, where support is also heavily concentrated. GEOCONCEPT uses partners for first-level support in most regions.

- **Market understanding and training:** GEOCONCEPT's reference customers gave it some of the lowest scores in this Magic Quadrant for the ability to understand organizations' needs and the quality and availability of end-user training.

IFS

IFS (http://www.ifsworld.com/) , which is headquartered in Sweden, is a Leader due to the breadth and depth of its product functionality and its industry strategy.

IFS's Field Service Management (FSM) product suite is suitable for organizations in multiple industries, especially those with both complex equipment or asset-centric use cases and high-volume, volatile scheduling use cases. We estimate that the suite has a core base of over 300,000 users.

IFS acquired multichannel customer engagement and FSM provider mplsystems in 2017 and has packaged it as an extension that provides other options for engagement modalities such as chatbots and portals. In the same year, IFS acquired WorkWave to serve small and midsize businesses (SMBs) better, improve its customer onboarding and provide deeper routing functionality across all products.

Strengths

- **Product breadth:** IFS FSM supports, among other things, intraday automated scheduling optimization, an API for IoT integration, use cases centered on complex equipment and parts planning and multiple customer engagement channels, complex invoicing and contract management.

- **Product depth:** IFS FSM supports mobile technician part swaps via mobile channels, return merchandise authorizations (RMAs), condition-based search (for example, for only refurbished parts), meter-based pricing and special charges in contracts. It also supports time-limited skills in scheduling, and both tender offer management and specialized project coordinator interfaces for organizations that use subcontractors.

- **Industry strategy:** IFS supports use cases such as tail planning in the aerospace sector, chain of custody for the handling of hazardous chemicals, meter/subscription-based contract billing, condition-based maintenance, building information modeling, GIS integration, and Food and Drug Administration (FDA) compliance (in the U.S. healthcare sector).

- **Sales execution:** IFS's sales are well-distributed throughout North America, EMEA, Asia/Pacific and Latin America, and it achieved significant growth for the year ended June 2018. It has also expanded its partnerships with sales, implementation and system integrator organizations.

Cautions

- **Integration:** Reference customers for IFS gave it scores among the lowest in this Magic Quadrant for ease of use of its APIs and packaged connectors. IFS does, however, offer connectors for Microsoft (Dynamics ERP), Salesforce and SAP, and it is investing in integration to reduce its reliance on the experience of system integrators for integration with ERP, CRM and many other systems.

- **Implementation CX:** Reference customers for IFS gave it low scores for the overall implementation experience on the basis of the technical services, high cost and length. In complex projects, professional service costs regularly exceed the license cost.

- **Marketing execution:** IFS rarely appears on customer shortlists seen by Gartner, especially outside Western Europe, despite successful implementations. We view this as an issue of brand awareness. IFS has, however, recently increased its investment in this area.

- **SaaS platform:** Although IFS has focused on cloud deployments of FSM and is gaining traction with this model, SaaS customers still account for a smaller percentage of its installed base than is the case with most vendors in this document. Prospective customers seeking multitenant solutions should make contact with reference customers.

Microsoft

Microsoft (http://www.microsoft.com/) , which has headquarters in the U.S., is a Visionary on the basis of its product strategy, sales execution and improving market responsiveness, which are offset by limitations in terms of its product's depth and its mobile strategy.

Microsoft has rebranded its FSM offering as Dynamics 365 for Field Service, and has moved it to the Azure platform. This reduces the configuration effort required to connect products such as Power BI and Azure IoT Central. Microsoft markets its FSM offering across industries, but it is often best suited to organizations with complex, equipment-centric use cases that rely on IoT connections, are parts-intensive and manage customer agreements.

We estimate that Dynamics 365 for Field Service has over 150,000 users, in a variety of industries, including discrete manufacturers, public sector agencies, healthcare and retail organizations. A large percentage of these deployments are small and midsize, though there are some larger ones as well. Many of the user licenses are packaged as part of larger offerings and are in various stages of implementation.

Strengths

- **Sales execution and geographic strategy:** We estimate that, with Dynamics 365 for Field Service, Microsoft is in the top fifth for revenue growth and the top third for total revenue, among vendors in this Magic Quadrant. In addition, Microsoft has trained direct resources in 190 countries.

- **Platform usability:** Microsoft offers multiple deployment options: private, public, government and hybrid cloud. Early adopters identify the opportunity to "build once and use everywhere" and less expensive integrations as benefits resulting from Microsoft's consolidation of products (such as Flow, SharePoint and Power Apps) onto common data and services platforms.

- **ROI:** Despite voicing reservations about the total cost, reference customers for Microsoft gave it the highest scores in this Magic Quadrant for ROI. Higher ratings for total cost tended to come from the larger customers.

- **Product breadth:** Microsoft has been investing in schedule optimization capability, with recent additions including resource pool, interval and temporary crew scheduling, and improved performance. Its Azure IoT Hub-based Connected Service that automatically creates field service work orders for corrective actions, HoloLens-based Remote Assist that connects technicians to experts, and parts-sourcing capabilities will help broaden its reach.

Cautions

- **Product depth:** Potential customers should assess their readiness to use Microsoft's platform to build additional functionality. Although Dynamics 365 for Field Service's functionality is broad, it may not be deep enough in areas such as RMA management, warranty claims and subcontractor management. Also, Microsoft has not yet generally extended its Azure AI platform capabilities for field service roles in Dynamics 365 for Field Service.

- **Industry engagement and alliances:** Although Microsoft has many independent software vendors as partners, it has relatively few dedicated to extending functionality specifically for Dynamics 365 for Field Service. On the other hand, a few of its implementation partners have been building accelerators to provide industry-specific templated configurations, and Microsoft has dedicated resources to assist them.

- **Integration:** Although Microsoft does offer data connectors "out of the box," including a new connector for Dynamics 365 for Finance and Operations, it does not offer packaged integration for other ERPs. Customers indicate that its system integrators need more experience.

- **Product maturity:** Organizations with complex scheduling needs should seek proofs that Microsoft's product can fulfill their business requirements. Microsoft Dynamics 365 for Field Service does not offer technician capacity forecasting, and several of its critical scheduling

capabilities are new. Also, few of Microsoft's customers have migrated to its "universal client" mobile app to benefit from a common data and services model — instead, most use the Resco-based solution it resells.

Oracle

[Oracle (http://www.oracle.com/)](http://www.oracle.com/) , which has headquarters in the U.S., is a Leader on the basis of its geographic strategy, sales execution and product depth, particularly in work planning and scheduling. Its Oracle Field Service Cloud (OFSC) product is aimed at a wide range of industries, including the technology, telecom, utilities, facilities and service sectors.

OFSC is best suited to large workforces in which there is interchangeability of skills between technicians and where technicians face a high volume of work orders and schedule volatility. It has connectors for multiple Oracle ERP products, and Oracle recently deepened the integration between OFSC and other products in its portfolio, such as Oracle Internet of Things Cloud Service, Oracle Service Cloud and Oracle Policy Automation.

Oracle has also continued to improve its strong schedule optimization capabilities with goal-based routing. We estimate that OFSC has over 300,000 users, about half of which are in the high-tech, telecom, discrete manufacturing and service provider industries.

Strengths

- **Product depth:** OFSC can predict a technician's time of arrival, due to its depth in areas such as calculating technician-specific work durations based on historical performance patterns, travel, and configurable rescheduling penalties that prevent it rescheduling work too often. Planners benefit from direct integration of capacity management and dispatch. OFSC helps support technicians with a video chat feature built into new native iOS and Android apps.

- **Geographic strategy:** Oracle has worldwide support coverage and trained field service teams in 50 countries. OFSC is available in 23 languages and deployed in 53 countries. Its use has been growing, especially in underserved regions such as Latin America and Asia/Pacific.

- **Product strategy:** Oracle has added capabilities to support multiple business models, including decentralized scheduling and outsourced service. It enables customers to offer free scheduling views and even preoptimized work schedules to their subcontractors. OFSC has incorporated new work demand creation channels by enabling automated work order creation directly from its customer service cloud and from its IoT cloud.

- **Scalability and platform:** OFSC supports single deployments with tens of thousands of users and integrations with dozens of systems. It connects to a search-engine-ready knowledge base, and can now be configured to visually match an organization's branding (colors, fonts and so on).

Cautions

- **Time to achieve ROI:** Although Oracle's reference customers scored it well for initial pricing, their scores for the time required to achieve an ROI were among the lowest in this Magic Quadrant. Oracle has introduced new support programs, services and LaunchPad learning accelerators to help improve this.

- **Industry strategy:** Oracle aims to provide horizontal usability and extensibility, but does not provide deep best-practice templates and industry-specific capabilities. It did not identify specific industry functionality in the survey for this Magic Quadrant.

- **Product breadth:** Organizations with complex, equipment-centric service requirements will likely need to integrate other products, potentially from Oracle and other vendors. Also, complex pricing calculations, parts management and planning, sourcing and reverse logistics may require extensions. A number of OFSC customers with whom Gartner has spoken use the product for schedule optimization only, despite its other capabilities.

- **Mobile extensibility:** Some reference customers indicated that integrating and extending OFSC is challenging, particularly in terms of mobility. Oracle's native mobile apps are new, and its new extensibility tools are unproven.

OverIT

[OverIT (https://www.overit.it/en/)](https://www.overit.it/en/) , which is based in Italy, is a wholly owned subsidiary of the Engineering Group, and is focused on FSM. It is a Visionary on the basis of its strong industry strategy and product innovation, offset by some geographical limitations and upgrade challenges.

OverIT is the Engineering Group's competence center for packaged GIS integration with partners and for its own GIS functionality. OverIT has made its SPACE1 augmented-reality solution into a separate SKU, but it is still integrated with Geocall, its FSM product.

OverIT targets several industries. It is best suited to organizations with complex scheduling use cases in the utility, oil and gas and manufacturing sectors that have safety and training concerns, rely on GIS-informed visualization and often employ remote subcontractors. We estimate that it has over 80,000 users, most of which are in EMEA and Latin America.

Strengths

- **Time to ROI:** Although reference customers reported implementation times near the average for vendors in this Magic Quadrant, they scored OverIT in the top quintile for time to ROI.

- **Product innovation:** Many of OverIT's recent releases have focused on innovations that enable technicians and subcontractors to execute more efficiently and safely. Its SPACE1 product has generated significant ROI in multiple deployments, each with several hundred users. OverIT also helps monitor safety through wearables, predict travel using historical traffic patterns, and track tools.

- **Industry strategy:** OverIT has a strong understanding of the evolving needs of its targeted industries. It has implementation templates and capabilities, such as for IoT integration for network monitoring, the ability to overlay cartographic imaging with work order data in both mobile and dispatch consoles, and regulatory support for the EU and Latin America.

- **Pricing:** For both on-premises and multitenant deployments, OverIT uses perpetual and subscription-based pricing models. It also offers special pricing arrangements for organizations that make heavy use of subcontractors.

Cautions

- **Product breadth:** Current OverIT customers typically rely on packaged and custom integrations with ERP and other systems for functionality in areas such as invoicing and customer maintenance agreements and plans.

- **Implementation partnerships:** OverIT has few truly global implementation partners. It performs the majority of its implementations directly.

- **Upgrade scalability:** The majority of OverIT's customers, many of whom are in regulated industries, have deployed the product on-premises (not in multitenant SaaS environments) and must manage upgrades as a project. Some customers have reported challenges with upgrade costs and effort. Many of its customers do not stay up-to-date with releases, especially minor ones. This requires OverIT to support multiple versions.

- **Geographical presence:** All of OverIT's implementations between July 2017 and June 2018 were in EMEA or Latin America. OverIT provides most of its global support through partners.

Praxedo

Praxedo (https://en.praxedo.com/) , which has headquarters in France, is a Niche Player on the basis of its innovative approach to specific industry use cases, which is offset by its narrow geographical coverage. The company has improved its thought leadership and added several features to improve its product's extensibility and native reporting and performance management capabilities. It has also delivered a native connector for Sage Enterprise Management and an instant messaging capability.

Praxedo is best suited to customers with use cases that generate a lot of communication between large organizations and even relatively unsophisticated subcontractor organizations, such as are found in the telecom, utility, home service and retail sectors. Most of its approximately 25,000 users are in SMBs, but it also has several large and very large clients.

Strengths

- **Market responsiveness:** Praxedo has added capabilities such as mobile workflow, Praxedo-to-Praxedo (for seamless bidirectional integration between an FSP and its contractors) and annotated image sharing between technicians and back-office experts. There is also support for Extensible Messaging and Presence Protocol (XMPP) communications with wearables (for status updates) and simple communications. Some of the largest French telecom companies utilize Praxedo's product.

- **Reporting and integration:** Praxedo offers a native "Cockpit" that contains several metrics and visualizations — such as for revenue trending and productivity — that help organizations operate and improve their businesses. It also offers native integrations with ERP, CRM and operations support systems (OSS, used in telecom) from vendors such as Intuit, Sage and Salesforce.

- **Implementation speed and overall cost:** Reference customers for Praxedo scored it in the top quintile across all cost categories and gave it the highest scores of any vendor for deployment cost. Customers have indicated that usage-based pricing, affordable entry points and the evaluation process encouraged them to choose Praxedo. The company reports that only 5% of its revenue comes from professional services.

Cautions

- **Geographical coverage and capacity:** The vast majority of Praxedo's new implementations are in EMEA, with the remainder all in North America. Praxedo performs most of its professional services work directly. It does not have large partners that could handle complex multiregion implementations.

- **Product breadth:** Praxedo's products lack depth in key functional areas, such as maintenance planning, reverse logistics and GIS integration. Its customer portal's capability is limited, and it has very few proofs of the capabilities of its IoT-driven connected field service, other than its OSS connectors.

- **Capacity:** Praxedo is the smallest vendor in this Magic Quadrant. It is self-funded, which somewhat limits its ability to invest, but it is profitable and has continued to invest in order to grow its organization quickly. Its only dedicated support team is in Paris, France, but it does also offer support using nondedicated resources in Munich, Germany, Madrid, Spain and Montreal, Canada during local business hours.

Salesforce

Salesforce (http://www.salesforce.com/) , which is headquartered in the U.S., is a Challenger on the basis of its strong sales execution for the Field Service Lightning (FSL) product, its innovative but unproven functionality and its mixed CX feedback.

Salesforce has recently added stronger capabilities for tracking customer-owned equipment and maintenance plans, and improved its guidance on product configuration and connecting to other Salesforce products, such as Salesforce Configure, Price, Quote (CPQ), Salesforce IoT and Salesforce Knowledge. In co-development with ClickSoftware, it has added functionality for scheduling as well.

Salesforce markets FSL across most industries, with many of its customers using it to support appointment-intensive, case-driven use cases in the manufacturing, professional services, retail, healthcare and high-tech industries. FSL includes a purpose-built native mobile app for iOS and Android, and administrators can configure custom actions that link Salesforce-platform-based custom apps, websites and other external functionality. We estimate that there were between 30,000 and 40,000 active users as of June 2018. This customer base is composed primarily of small and midsize organizations, but also includes a few large organizations that have completed initial divisional or geographical rollouts.

Strengths

- **Innovation:** Salesforce has connected FSL to other Salesforce products, such as Trailhead (to link skill development with scheduling) and Salesforce Knowledge (to enable technicians to review articles attached to work orders even while offline). It has added crew scheduling and can create service areas dynamically, based on daily demand. Salesforce Einstein's AI capabilities can help predict needed parts on the basis of past execution of particular activities.

- **Viability:** The Salesforce AppExchange contains over 5,000 apps and extensions, with over a dozen specifically for FSL. FSL SKUs include a significant amount of tightly integrated Salesforce Service Cloud functionality. Salesforce indicates that FSL remains the fastest-growing product in the company's history. Salesforce has strong alliances and partner success management teams, which help it scale and improve.

- **Revenue growth:** We estimate that despite being relatively new (it was released in 2016), FSL achieved the highest year-on-year revenue growth of any FSM product from vendors assessed in this Magic Quadrant.

- **Platform:** FSL is packaged with many Salesforce Service Cloud capabilities (this promotes cross-training). Administrators can build mobile apps and call them from the FSL mobile app. The platform has helped Salesforce deliver three releases a year.

Cautions

- **Implementation CX:** Reference customers for Salesforce indicated that documentation, mobile functionality, integration and data templates are lacking. They also reported longer-than-average implementation durations, which they attributed partly to misconfiguration, limited data templates and a need for more staff experience.

- **Cost:** Reference customers gave Salesforce some of the lowest scores in this Magic Quadrant for satisfaction with overall ROI and implementation. They expressed only average satisfaction with its licensing, maintenance and internal costs.

- **Product maturity and depth:** Customers may need to wait for Salesforce to further develop unproven capabilities, or develop these capabilities themselves. These include pricing and invoicing, parts supply chain management, customer feedback management, high-volume IoT-event-driven workflow orchestration, field service analytics and performance management.

- **Technical support operations:** Although some customers indicate that the quality of Salesforce's support contacts and communications is good, they consider the timeliness and completeness of its responses to product questions to be poor.

SAP (Coresystems)

SAP (http://www.sap.com/) , which has headquarters in Germany, is a Visionary on the basis of its strong sales alliances and industry strategy, which are offset by a need to improve its component integration, deployment tools and mixed CX. SAP acquired Coresystems in 2018. We evaluated SAP on the basis of the current capabilities of the cloud-based Coresystems product, now branded SAP Field Service Management (FSM), and its discontinuation of the previous FSM work-planning and mobile capabilities of the SAP Service Cloud suite.

Since the acquisition, SAP has enhanced the deep packaged integration with SAP ERP Central Component (ECC) and released integrations for SAP S/4HANA, Enterprise Asset Management, Predictive Service and Leonardo IoT. It has also updated the user interface and integration with SAP Service Cloud and offers SAP FSM either as part of Service Cloud or on a stand-alone basis. For schedule optimization, SAP no longer resells ClickSoftware's products regularly with Service Cloud, but still offers on-premises ERP customers the option to use either SAP Multiresource Scheduling or the light scheduling capabilities of SAP FSM. The subcontractor and freelancer management capabilities are now available separately as SAP Crowd Service.

SAP aims its suite at many industries, but especially organizations in the discrete manufacturing, telecom, medical device service and utility sectors that use in-house technicians, subcontractors and freelancers, service complex equipment and need proprietary mobile form capabilities. We estimate that SAP FSM's customer base is between 250,000 and 275,000 users.

Strengths

- **Market understanding:** SAP's acquisition of Coresystems gives it extensible mobile support for outsourced field service and some AI and predictive maintenance capabilities that complement SAP's investments in SAP Service Cloud, Fieldglass, Predictive Service and Leonardo IoT. Reference customers' scores put SAP in the top third of vendors in this Magic Quadrant for its ability to understand their organization's needs.

- **Product breadth:** SAP is delivering new digital service support channels, such as SAP AR Service Technician and a voice bot for hands-free digital interaction. Its adjacent products are complementary in areas such as knowledge management, parts logistics and warranty management.

- **Implementation speed:** SAP achieved a top-third implementation rate from July 2017 through June 2018 and is one of few vendors that offer packaged ERP and CRM integration connectors.

- **Partner ecosystem:** SAP has a well-established partner channel that will expand the addressable market for SAP FSM. It has transitioned support and sales responsibilities to global SAP CX teams and provided initial training.

Cautions

- **Product transition:** Integrations with SAP S/4HANA, Leonardo and Service Cloud are unproven. Meeting the needs of prospective and existing customers will take time and require testing by current early adopters. This may lengthen delivery times for previous roadmap commitments.

- **Customer support:** Reference customers' scores for customer support put SAP in the lower third of vendors in this Magic Quadrant. SAP's global support teams need to gain experience, especially in geographic areas not previously covered by the Coresystems teams.

- **Technical CX:** SAP FSM combines multiple components through integration. Customers in its target markets often require additional integration and extensibility, but reference customers' scores were below the average for vendors in this Magic Quadrant for technical tools, customization and APIs.

- **Sales execution:** Prospective customers of SAP have reported challenges with negotiation and confusion about some overlapping product offerings. This is because, among other things, SAP now has a different strategy for schedule optimization and multiple options for maintenance planning.

ServiceMax

ServiceMax (https://lp.servicemax.com/Demo-ServiceMax-Scheduling.html?
utm_source=google&utm_medium=cpc&utm_campaign=EMEA:_Search:_Brand_Name&utm_content=servicemax&utm_term=servicemax&utm_matcht
, which has headquarters in the U.S., is a Leader on the basis of its innovative and broad product functionality and its thought leadership. ServiceMax generally aims its products at organizations with use cases centered on both proactive and reactive service for complex, connected equipment, such as equipment manufacturers, medical device service providers, specialty service providers and construction companies. It has also recently begun targeting industrial operators, such as utilities and oil and gas companies.

Most of ServiceMax's back-office and user-facing components are built on the Salesforce Lightning platform, but it also offers native iOS and Android mobile apps. Most of ServiceMax's new customers have large workforces of over 300 technicians plus subcontractors. We estimate that the company's user base has grown to between 325,000 and 350,000 users.

Note: In February 2019 (after the evaluation period for this Magic Quadrant), Silver Lake acquired a 90% stake in ServiceMax. GE Digital retained a 10% stake and a formal reseller agreement. Also in February 2019, ServiceMax announced it had acquired collaboration and communications software company Zinc, a former strategic alliance partner.

Strengths

- **Solution innovation:** ServiceMax has integrated its product with GE Digital's asset performance management software to better inform usage- and condition-based maintenance execution. An IoT-enabled customer portal enables an FSP's customers to initiate parts ordering, approvals and remote service requests. Reference customers' scores put ServiceMax in the top fifth for innovation.

- **Marketing execution:** ServiceMax's thought leadership extends to blogs, books and a business value realization program that helps its direct customers and prospective clients understand their organizational maturity, as compared with ServiceMax's existing customers. This helps customers identify areas with the biggest potential ROI.

- **Platform:** ServiceMax users have the extensibility and product interoperability benefits of being on the Salesforce Lightning platform. They can also access purpose-built mobile apps, workflow management capabilities and data synchronization configurations (such as contextual parts lists) built separately by ServiceMax outside this platform.

- **Product depth:** ServiceMax offers out-of-the-box connectors for IoT platforms from GE Digital and PTC, as well as connectivity to several others. Administrators can configure service flows based on work order attributes such as type, status, customer, failure code and contract. They can use the included performance dashboards to track ROI.

Cautions

- **Implementation CX:** Reference customers' scores put ServiceMax in the bottom third for implementation execution and support, among vendors in this Magic Quadrant. They also indicate that they expected a shorter implementation, despite the product's complexity. ServiceMax has among the longest implementation times of vendors in this Magic Quadrant.

- **Mobile form extensibility:** Administrators can create simple proprietary mobile forms without writing code, but organizations with complex needs should check in advance whether they will need to purchase one of the partner products that ServiceMax resells.

- **Alliance and partnership viability:** ServiceMax's offering is dependent on Salesforce at a time when Salesforce is increasingly competing for the same FSM customers. Although ServiceMax's relationship with GE Digital has added to its addressable markets, some potential customers prefer software vendors that also own the platform.

- **Operations:** Scores from ServiceMax's reference customer for support quality were among the lowest for vendors in this Magic Quadrant. Customers should check with reference customers to see whether recent investments and new ownership have improved matters.

ServicePower

ServicePower (https://www.servicepower.com/) has its headquarters in the U.S. It is a Visionary on the basis of its product innovation and subcontractor-driven industry vision — strengths that are offset by limited geographical coverage and the limited percentage of its user base that is on the latest versions of its products.

ServicePower is best suited to organizations that need to schedule work automatically for both technician employees and subcontractors ("authorized service providers"). It has released a new product called ServiceOnboarding to handle subcontractor vetting and certification management. ServicePower can optimize complex warranty claims, insurance coverage and contract entitlements for both B2B and B2C use cases. It recently enhanced its consumer portal to include warranty entitlement validation, product registration and self-scheduling. It also repackaged its Field Service Management Suite to include asset, inventory and contract management, and ported its analytics reports to the Domo platform. Customers can also subscribe to ServicePower's marketplace of over 40,000 service providers.

Discrete manufacturers, insurance and home warranty providers, electronics and appliance manufacturers, and service providers make up the majority of ServicePower's customer base. We estimate it has over 400,000 resources (including technicians and subcontractors), which are scheduled through a combination of its Contractor Management and Schedule Optimization products. We estimate that only about 20,000 of these are using ServicePower's newest mobility apps.

Strengths

- **Product innovation:** In addition to the enhancements mentioned above, ServicePower has recently begun offering a solution called IoT and Connected Home via IoT partnerships and integrations with popular home automation hubs. These enable insurance customers, for example, to initiate service requests via Amazon Alexa devices. ServicePower has also embedded HERE maps for global routing and real-time traffic-based schedule optimization, and now has over 300 APIs.

- **Reporting:** ServicePower offers dozens of out-of-the-box reports and configurable dashboards on the Domo platform, which can import external data and facilitate collaboration both internally and externally. These reflect best practices that ServicePower has learned over decades of operation in its targeted markets.

- **Partnership strategy:** ServicePower is building an ecosystem of partners, including OEMs, that aligns with its vision for handling all industries that serve the consumer. It has, for example, partnerships and integrations with packaged service/business management application providers, parts distributors, and integration platform as a service (iPaaS), IoT, augmented reality, ERP and CRM vendors.

- **Cost:** Reference customers' scores put ServicePower in the top third of vendors in this Magic Quadrant for overall ROI.

Cautions

- **Geography:** At the time of writing, ServicePower does not have customers headquartered outside North America and EMEA. All its support is provided from the U.S. and the U.K.

- **Mobile extensibility:** Reference customers indicated that considerable effort and knowledge of coding are needed to extend ServicePower's mobile app. Integrated mobile and back-office workflow development capabilities are limited, and the app is relatively new.

- **Product maturity:** Given that ServicePower has many new products and multiple discrete customer bases, customers may need to overcome functionality gaps in current releases of its software.

- **Market responsiveness:** A large percentage of ServicePower's user base uses its contractor management solutions only. In organizations with in-house workforces, adoption of Schedule Optimization and the consumer portal has increased, but adoption of the mobile, inventory and contract management capabilities is low.

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

None.

Dropped

- **Comarch,** which did not meet the inclusion criteria for this Magic Quadrant.

- **Coresystems,** which was acquired in June 2018 by SAP. In this Magic Quadrant, we evaluate the former Coresystems product as part of SAP's portfolio.

Inclusion and Exclusion Criteria

Inclusion criteria were used to determine which vendors appear in this Magic Quadrant. Each vendor could identify one product or suite for evaluation. Each reference customer identified by the vendors had to be "new" (that is, never before submitted to us for participation in a Magic Quadrant survey).

Market Presence and Momentum

Factors that affect our evaluation include 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 required each vendor to:

- **Identify reference customers:** Each vendor had to identify reference customers for the product proposed for evaluation in this Magic Quadrant. These customers had to:

  - **Cover at least two regions:** Each vendor had to supply details of at least five new FSM reference customers that began using the product in question no earlier than July 2017. These customers had to cover at least two of the following markets: North America, Latin America, EMEA, Asia/Pacific and Japan.

  - **Have midsize or large, stabilized deployments:** Each vendor had to identify at least two new FSM customers with more than 100 technicians in production environments for between six and 24 months that use the latest major version of the software and have integrated it with system(s) of record.

- **Disclose revenue:** Each vendor had to provide evidence of at least $7.2 million in FSM software license, maintenance and support revenue (excluding professional services) during the four fiscal quarters that ended closest to the end of June 2018 and no earlier than March 2018 (per generally accepted accounting principles [GAAP] or International Financial Reporting Standards [IFRS]). Representations had to be confirmed in writing by an appropriate finance executive within the vendor's organization (such as the CFO). The following had to be well represented and supported:

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

  - Two major geographical markets (out of North America, Latin America, EMEA, and Asia/Pacific and Japan).

  - Two industries (for example, utilities, telecommunications, high tech, oil and gas, manufacturing, aerospace and defense, automotive, financial services and insurance, chemicals, medical devices, healthcare).

- **Have functional breadth:** Each vendor's submitted product had to provide at least five of the following seven categories of functionality, plus integration, analytics and extensibility features:

  - Demand management and customer engagement

  - Work planning and scheduling

  - Technician enablement, including digital service support channels

  - Work order debrief

  - Invoicing and reporting

  - Agreements, operations and contractors

- **Have market recognition:** Each vendor had to be recognized in the market, as evidenced by regular appearances on the shortlists of Gartner clients, appearances at tradeshows and identifications as a competitor by other vendors.

- **Have a market following:** Each vendor had to provide evidence of thought leadership — used by customers in live operations — through webinars, market-related white papers, blog articles and user communities.

Short-Term Viability

Gartner's criteria required each vendor to provide evidence of:

- **Funded operations:** Sufficient cash to fund 12 months of operations at the current "burn rate."

- **Onboard professional services capacity:** Sufficient professional services to fulfill customer demands during the next 12 months.

- **Additional professional services capacity:** A practice and ecosystem with sufficient third-party consulting and integration companies to grow at a double-digit pace for two years.

- **Sales pipeline:** A pipeline of prospective customers and an adequate sales team to drive growth in new business.

- **Strong future revenue:** Indications that results for the upcoming four quarters (from 1 July 2018) would exceed the previous four quarters' results.

Evaluation Criteria

Ability to Execute

In addition to evaluating the standard FSM capabilities, we emphasized the following product capabilities as differentiators within the Ability to Execute "Product or Service" criterion:

- CX enhancement and customer-facing functionality

- Performance management analytics

- Digital service support channels (such as bots, remote video support, chat and augmented reality)

- Emerging business models (such as outcome-based service and equipment as a service)

- AI-driven decision support

- Third-party service provider enablement

- IoT platform integration and orchestration

- Long-cycle service scheduling

- Long-term forecasting and planning

- Integration with CRM sales (opportunities and offers, for example) and service (such as case management)

- Field service supply chain support for replacement parts

- GIS integration

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 (April 2019)

Completeness of Vision

Within the Completeness of Vision evaluation criteria we emphasized:

- Thought leadership and marketing presentations

- Customer adoption of best practices, industry templates and connectors

- Ability to attract partners and develop programs

- Ability to demonstrate benefits from alliances and partnerships

- Overall product breadth and depth

- Ability to articulate trends, user needs and product capabilities

- Ability to translate perceived opportunities into business

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High

Evaluation Criteria ↓	Weighting ↓
Business Model	Medium
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	Low

Source: Gartner (April 2019)

Quadrant Descriptions

Leaders

Leaders demonstrate a market-defining vision of how technology can help service professionals achieve business objectives. Leaders have the ability to fulfill their vision through products, services, ecosystems and solid business results in the form of revenue and earnings. They have strong partner programs, which are formalized and "gamified," and they track proof of renewal every year.

Leaders have significant, successful reference customer deployments in North America, EMEA and Asia/Pacific in a wide variety of industries, with multiple proof points above 2,000 users. They have a robust native scheduling engine that is scalable to thousands of employee and third-party technicians. They also have strong and innovative technology-based service enablers (such as IoT enablement, social collaboration, AI-driven decision support and chatbots), and end-customer engagement tools for, and coverage (either directly or through certified partners) of, all six categories of FSM capability. Leaders have many successful integrations with multiple systems of record (especially ERP and CRM systems) from multiple providers; and many deployments in multitenant deployment models.

Other providers measure themselves against the Leaders and emulate their strategies and tactics. Leaders demonstrate market strength, based on installed-base depth, and they affect market trends in terms of all the criteria by which they are evaluated. Leaders' software users often consider that they are gaining a competitive advantage over others in their industry.

Challengers

Challengers are often larger than Niche Players, and demonstrate a high volume of business, especially with existing customers. Challengers have the size to compete worldwide and an existing base of customers to sell to.

Challengers understand the evolving needs of service organizations, but may lack the ability to lead customers into new functional areas with their functional vision, product breadth, innovation or enhancement velocity. Challengers tend to have a good technology vision for architecture and other IT organizational considerations, but they may not have a strong influence on the direction of the FSM market. They may lack native scheduling optimization, robust mobile apps, proven integration with multiple ERP providers, or proven coverage of both high-volume and high-complexity use cases.

Challengers often have a strong market presence in other application areas (such as parts and asset management, salesforce automation, customer engagement center support, finance and order management). But they either have not demonstrated a clear understanding of the FSM market's direction (which focuses on end-to-end process) or are not well-positioned to capitalize on emerging trends, due to incomplete product breadth or the nature of their delivery model.

Visionaries

Visionaries lead many competitors in terms of technology, functionality or business model innovation. They influence, or have strong potential to influence, the direction of the FSM market. However, they are typically limited in terms of execution or demonstrated track record. In general, their products and market presence are not complete or established enough to challenge the Leaders.

Like Leaders, Visionaries have a robust scheduling engine that is scalable, strong and innovative; technology-based service enablers; and coverage, either directly or through certified partners, of all six categories of FSM capability. They have single-tenant and multitenant offerings with proven scalability and adoption, and are introducing new ways of utilizing cloud processing power or deeper support for underserved field service business models, such as outsourced field service and connected outcome-based field service (packaged IoT).

Although Visionaries have many of the same product capabilities as Leaders, these are not as deep or as fully proven through repeatable deployments at scale. In addition, Visionaries' reference customers or partners may point to gaps in service or functionality execution. Visionaries may not yet have the alliances and partnership maturity necessary to execute globally and to deliver the innovation and flexibility enhancements expected by the market. As they mature in execution, Visionaries could become Leaders, Challengers or Niche Players, depending on their pace of innovation and how their vision evolves.

Niche Players

Niche Players offer strong FSM products, but they may lack some functional components, may not show the ability to consistently handle deployments of more than 1,000 field technicians across multiple geographies, or may lack strong business execution.

Niche Players may offer complete portfolios for a specific industry or use case. However, they face challenges in one or more important areas in terms of supporting cross-industry requirements, such as complex forecasting and translation of SaaS's cloud computing power into functionality. They may have an inconsistent track record of implementation, inconsistent references, or lack the ability to support large-enterprise requirements.

Despite these potential shortcomings, Niche Players can often offer the best solutions for the needs of particular service organizations, given the price-to-value ratio of their solutions.

Context

Vendors included in this Magic Quadrant have demonstrated an ability to provide multitenant SaaS and, in many cases, single-tenant hosted products that support FSM for midsize and large enterprises in a range of industries. Some provide narrow, but deep, field service scheduling optimization or mobile apps. Others provide broad service suites.

It is common for large enterprises to use more than one FSM application, depending on the industry, nature of service and regional makeup of their user base.

Prospective customers should first narrow their lists of potential suppliers according to the nature of the service required. At the highest level, most organizations fall into one or both of the following categories:

- **High-volume of work orders per technician per day and high schedule volatility:** Technicians in these organizations perform many work orders per day (more than eight) and many of the technicians' planned schedules change dramatically throughout the day, due to emergency or other unplanned work and customer cancelations. For these organizations, we often advise using products capable of real-time intraday schedule optimization (as opposed to batch optimization), such as those of ClickSoftware, Oracle and ServicePower.

- **Complex service, or both complex and high-volume service:** Dispatchers in these organizations must carefully analyze each work order to identify the most appropriately skilled technician. There are often special parts, tools and helpers that must be coordinated ahead of the visit. Vendors such as Accruent, Microsoft, SAP and ServiceMax specialize in complex service, but also provide basic schedule optimization. There are also vendors like Astea International and IFS that add capabilities such as customer management or invoicing traditionally found only in ERP applications.

Secondly, organizations should look for vendors that serve specialized needs, such as for:

- **Native GIS capabilities:** Several vendors, especially those that work with gas or electrical transmission utilities have integrations with GISs. Data from a GIS is useful to enable visualization of hidden infrastructure (such as transmission pipelines beneath a street) or determine the GPS locations of assets that do not have an address (such as cell towers and telephone poles). Vendors such as GEOCONCEPT Group and OverIT offer native capabilities, in addition to integrations.

- **Outsourced field service:** Organizations that make heavy use of external service providers, brokers, talent agencies or freelancers look for software that can help align vetted vendors, onboard new vendors, and assign work to other organizations in a way that integrates with internal scheduling (see "Eight Components of Successful Outsourced Field Service Management"). Vendors such as Praxedo and ServicePower specialize in connecting external providers with the primary organization. Several others integrate with companies like Field Nation and WorkMarket to provide this functionality.

- **Asset-centricity and connectivity:** Organizations that manage equipment with heavy reliance on integration with IoT platforms could prosper by using almost any vendor in this Magic Quadrant. However, some vendors, such as Accruent, Microsoft, SAP and ServiceMax, have special strengths or more proof points in this area.

- **Ease of implementation:** For organizations looking for an easy-to-learn solution with a short implementation time and the ability to easily create new screens, checklists and forms in a mobile app, products from vendors such as FieldAware and Salesforce are often suitable.

- **AI-informed decision support:** Organizations able to train AI models should look for vendors with capabilities in areas such as prediction of necessary parts, prediction of work duration and prediction of future traffic conditions.

Other needs can also be defining factors that help identify the most suitable products: for example, support for complex custom mobile forms, depot repairs and returns, warranties, predictive maintenance contracts, maintenance plans and workforce attributes (including experience level and knowledge of existing digital tools). The systems of record to be integrated and the effort required to integrate them may also greatly influence an organization's choice. 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 any functional gaps in the main vendor's offering.

This Magic Quadrant evaluates key FSM vendors, but is not intended to be an exhaustive examination of all FSM vendors, solutions and products. It is intended to be a valuable tool with which to assess and compare vendors. However, readers 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.

Market Overview

Gartner estimates that revenue from packaged FSM cloud subscriptions, software licenses and maintenance — not including services — amounted to $2.03 billion during the 12 months ending in June 2018 (up approximately 18% from 2017). Among the drivers of this growth was a recognition by CEOs that:

- **FSM generates leads and revenue:** FSM technician enablement and digital service support create opportunities for top-line growth, as well as increased profitability through efficiency, because technicians are better able to translate the trusted-advisor relationship into increased sales.

- **The cloud is accessible:** FSM products were some of the earliest to adopt the cloud, because data exchanged with field technicians had to pass beyond the corporate firewall anyway. Efforts to secure this exchange must be undertaken in order to fully adopt mobile capabilities. Over the

years, FSM providers have developed strong security, governance and scalability capabilities.

- **Mobile technology is accessible:** Whereas many organizations were once forced to evaluate only expensive, "hardened" mobile devices, they now find that consumer mobile devices are more affordable, durable and easy to protect. At the same time, battery life, cellular transmission rates and coverage, and portability have improved.

- **Competitors are succeeding:** Equipment operators and owners have come to expect that their service providers will use the latest technologies to provide the most efficient and highest quality service. It is increasingly difficult for analog FSPs to compete with those that use multiple digital technologies in their field service operations.

FSPs are disrupting their competitors largely by incorporating technological capabilities into aspects of their operations that previously lacked it — for example, IoT-connected field service and maintenance-timing adjustment based on predicted outages. They are proving the benefits of AI-informed support for, for example, deciding which technician to assign (based on efficiency and effectiveness on similar jobs), assessing the likelihood of needing certain parts, predicting traffic conditions and enabling natural language processing. Remote diagnosis and even resolution of issues is becoming more prevalent and driving down traditional metrics such as first-time fix rate, mean time to repair and time between failures.

Below are some insights from our analysis of the survey responses elicited from the vendors' reference customers (see the Evidence section):

- **Cross-organizational integration:** The ability for customers to initiate workflows directly, and to track them in real time (including status updates, technicians' travel progress and requests for quotations), is increasingly important. Thirty-nine percent of the FSPs surveyed indicating that they offer customers a "customer portal" to promote this type of digital experience, and another 49% indicating that they would do so within 12 to 24 months.

- **Outcome-based contracts:** These can include reliability-centered maintenance, predictive maintenance, usage-based maintenance and equipment-as-a-service contracts. Of 62 respondents, 19% were already offering these contracts, and another 26% expected to do so within 12 months. Approximately one-third of the respondents already offered usage-based contracts, which are seen as predecessors to outcome-based contracts because most outcome-based contracts require capture of real-time or near real-time usage, performance metrics and environmental conditions from sensors in or near equipment.

- **Zero-touch service:** In 2017, Gartner predicted that by 2020, 10% of emergency field service work would be both triaged and scheduled by AI, up from less than 1% in 2017. Of the surveyed reference customers, which represent a small but often leading portion of the overall market, 15% indicated that they already schedule some work automatically.

- **Growing use of consumer devices:** When asked what type of device their technicians primarily use, 40% of respondents said a consumer-grade tablet or laptop PC; 33% said a consumer-grade phone; 22% said a ruggedized device; and for 5% the situation was too mixed to decide.

- **Increasing use of smaller form factors:** In terms of overall form factor, 39% use a handheld (phone), 37% use a tablet and the remaining 24% use a laptop or other device.

- **Number of technicians per dispatcher:** Across industries, and with outliers removed, the average was 21 technicians per dispatcher.

- **Cost breakdown:** Of the total cost, licenses represented approximately 40%, implementation 30%, integration 20%, and the remainder was split between hardware devices and back-end cost.

- **Deployment model:** On-premises deployments declined from 41% in 2016 to 31% in 2017 to 22% in 2018. The move has been more to dedicated instances than to multitenant instances. Fifty-four percent of the respondents indicated that they utilize a dedicated instance hosted by their vendor (34%) or a third party (20%). The figure for multitenant was unchanged at 24%.

- **ROI:** Respondents were new customers, so many were still working to achieve an ROI. But for those that had both achieved and tracked one, the mean time to achievement was 13 months, up from 10 months in 2017. This could be attributable to increased overall investment in adjacent technologies and deeper functionality within each of the six categories of FSM capability.

Evidence

- At the start of the research process for this Magic Quadrant, all invited vendors were asked to supply contact details for a minimum of five to seven new reference customers that generally represented the requirements of the inclusion criteria. This information was used to invite the customers to complete a 30-minute online survey.

- A total of 87 reference customers from 14 vendors responded to the survey, which concluded in August 2018. A subset of these customers, plus additional vendor-identified reference customers, also participated in telephone interviews in subsequent months.

- Gartner analysts also acquired insights from several hundred clients through the Gartner inquiry process, one-on-one meetings at events and customer reviews on Gartner's Peer Insights page. These provided directional support for opinions derived from earlier data.

Note 1
Cutoff Date

A Magic Quadrant analysis represents conditions at a specific point in time. To be consistent and complete in its analysis, Gartner prescribes a date on which product or service capabilities need to be "in production" (generally available) in order to be considered for evaluation. The original cutoff

date for this Magic Quadrant was June 2018. However, in light of unavoidable delays and a desire to work with current data, vendors were also asked to provide a written addendum describing relevant new functionality released through February 2019.

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.