IDC MarketScape

IDC MarketScape: Worldwide Service Parts Planning Applications 2023–2024 Vendor Assessment

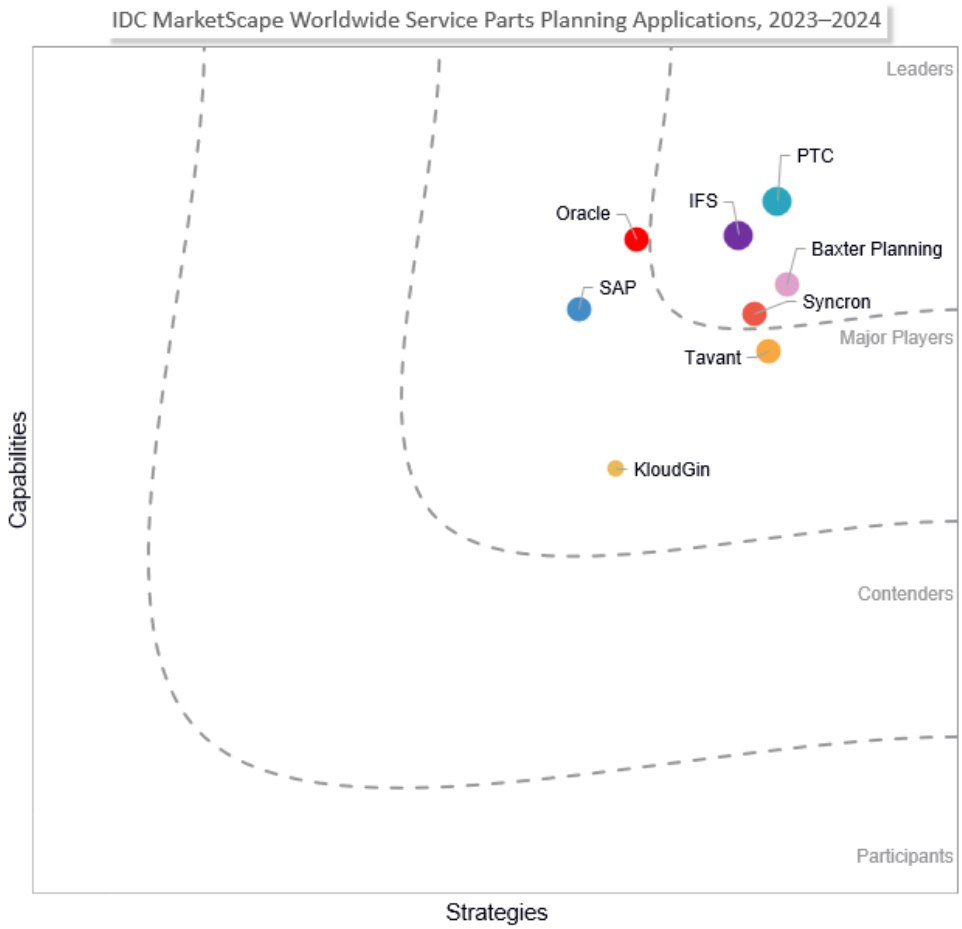
Aly Pinder

THIS IDC MARKETSCAPE EXCERPT FEATURES: PTC

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Service Parts Planning Applications Vendor Assessment



Source: IDC, 2023

December 2023, IDC #US49989323e

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Service Parts Planning Applications 2023-2024 Vendor Assessment (Doc #US49989323e). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Speed of issue resolution has become critical to service success. Customers and operators expect the service experience to improve beyond long wait service windows or extended asset downtime. In IDC's 2023 *Product Innovation and Aftermarket Service Survey,* top drivers for service leaders were faster response to product quality and service issues (47.9%) and establishing more capabilities around remote service, collaboration, and resolution (44.8%). Knowing more about asset performance gleaned from Internet of Things (IoT) connectivity and remote monitoring data is enabling service organizations to better plan and prepare for future service demand. Often a fix requires a service spare part, and organizations need to align parts resources with the ability to execute on the work. The disconnect too often occurs as service parts planning is not managed by the service operation or a lack of visibility hinders proactive action. This model is evolving as the impact of service parts becomes more evident to service and business leaders.

Further complicating the service life cycle is the web of suppliers, dealers, and partners that need to be managed. Service organizations need to plan with a variety of stakeholders in mind as each node within the service supply chain can have varying levels of technology maturity. If data across this network is of poor quality or nonexistent, the ability to accurately plan to meet future service needs will be compromised. The service parts planning market is ripe for technological advancement. IDC research (see *Market Analysis Perspective: Worldwide Aftermarket Services Strategies Applications, 2023,* IDC #US51164723, August 2023) highlights that service leaders expect to become more proactive, predictive, and prescriptive within their service business model requiring better insights into service parts needs/availability. Service parts planning can no longer be an afterthought disconnected from the service life cycle, which includes service execution and issue resolution.

This study assesses the business strategies and capabilities of many notable technology vendors in service parts planning and aftermarket service. Key findings of this service parts planning vendor assessment include:

- Service parts planning is a critical aspect of field service execution and issue resolution. Service leaders are recognizing the need to be better prepared to solve future issues and meet the needs of service demand. Knowing an issue will become present without securing the parts needed to solve that problem is a missed opportunity.
- The complex is only becoming more complex. The service supply chain and service parts market continues to evolve rapidly as customer needs continue to ramp up. Customers expect real-time visibility into the service experience and also issues to be solved quickly. But too often the service organization doesn't know the reason for a product failure let alone what parts will be needed to achieve resolution.

- Service parts inventories reside in a variety of locations with the ability to solve problems across a global network. From vans, trucks, depots, customer sites, third-party locations, dealers, distributors, and suppliers, service parts can be difficult to locate, manage, and plan for use. Service organizations need to rationalize all of these inventory points to both resolve more issues and cut the cost of service. When service organizations know what service parts are available and where along with what issues need to be resolved, service can prioritize the right parts for the right problem at the right cost.
- This IDC MarketScape highlights the unique capabilities and future strategies of each vendor that aid service leaders, service parts planning managers, technology buyers, influencers, and partners to successfully and adeptly evolve the service planning function and explore opportunities to become a (more) digital business.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

For the purpose of this study, we have focused on those vendors that we deem to be notable because of the following characteristics:

- Vendors must have a service parts planning application or offering that is currently commercially available.
- Vendors must have customers in at least four industry segments and in at least three geographic regions.
- Vendors must have served the service parts planning and aftermarket for at least five years.
- Vendors must have capabilities to support end-to-end service parts planning activities and processes.

Each of the vendors included in this study meets the aforementioned requirements. There are vendors that offer applications or products for a subset of service parts planning processes or support adjacent markets that are notable but not included because they do not meet the "end-to-end requirement" commercially available currently for the service parts planning market. This may change in the future, and future publications of this study will have additional inclusions.

ADVICE FOR SERVICE PARTS LEADERS AND TECHNOLOGY BUYERS

Service parts planning continues to be a fertile ground for technology investments, automation, and digital business transformation. Historically, service organizations prioritized other processes for investment, which has made service parts planning a lagging area for change. In this current environment, service leaders are beginning to recognize the opportunity to focus on service parts planning to improve service quality outcomes, cost reductions, and customer experiences. The right part at the right time for the right problem is no longer a marketing phrase, it is an opportunity for service excellence and transformation.

For service organizations intending to transform their service parts planning process and operations, IDC offers the following recommendations:

- **Make service parts planning an integral process within your broader service business model strategy.** Service parts planning must evolve beyond being a back-office activity disconnected from the aftermarket service strategy. The shift to as-a-service models depends on resource availability and better planning to ensure equipment issues can be solved prior to failure and

the cost to serve can be improved. But too often service parts planning isn't considered when organizations leap into servitization, outcome-based models, or as-a-service contracts. The entire service team needs to be on the same page to avoid issues with service business model transformations.

- **Evaluate the technology infrastructure and legacy systems within your organization.** No technology investment or process change can be viewed in a vacuum. Service parts planning tools must be examined through the lens of how data will inform other decisions, automate downstream/upstream processes, and advise business functions beyond service. Also, legacy systems constraints need to be understood to ensure data quality as decisions need to be trusted, actionable, and accurate.
- **Consider the ecosystem and how shared goals can accelerate innovations.** In an ever-more connected world, rarely do service organizations work with only one or so partners. The positive aspect of a fragmented technology and partner market is shared risk. Also, service organizations should look to their partner ecosystem to leverage the scale and learned experience to accelerate new innovations.
- **Expect more data on the horizon and prepare to get faster to achieve the right insights.** More and more assets are connected providing real- or near-real-time performance data. These additional data points will soon become too much to be managed without automation and advanced tools. Augmentation of planning work with big data, predictive analytics, artificial intelligence (AI), and machine learning will be needed to quickly make sense of large data sets across a global network of things, assets, equipment, customers, and partners.
- **Don't underestimate the role of change management on digital transformation.** Automation and technology enhancements too often get pushed down to the service team with limited buy-in or education. Parts planning is a process that can benefit from advanced tools and technological capabilities. But if the planning team is not included in the new tool rollout, there will be some angst. Any tool, but especially a planning tool, needs to be trusted by the users. Service parts planners need to trust that the insights received from any digital tool are accurate, precise, and dynamic. Managing changes in tools, technologies, processes, and data will be crucial for the service process and to maximize the value of any investments.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

PTC

PTC is positioned in the Leaders category in this 2023–2024 IDC MarketScape for worldwide service parts planning applications.

PTC (Nasdaq: PTC) is a global technology vendor that provides capabilities for the service parts planning activities and is headquartered in Boston, Massachusetts. PTC has served the aftermarket and service parts planning market for 38 years. In the past three years, PTC has acquired Onshape, Arena Solutions, Intland Software, Codebeamer, and ServiceMax in support of its aftermarket service capabilities. PTC has strategic partnerships specifically for the aftermarket and service parts planning with Accenture, Amazon Web Services (AWS), Capgemini, Cognizant, Deloitte, Ducker Carlisle, Infosys, ITC Infotech, Kalypso, L&T Technology Services, Microsoft, OnProcess Technology, Tata Consultancy Services, and Tech Mahindra.

PTC offers a wide breadth of capabilities in support of service parts planning activities including parts demand planning, service demand forecasting, parts pricing, parts returns, parts tracking, dealer inventory management, network optimization, multi-echelon optimization, critical parts management, defective parts identification, predictive analytics and business intelligence, artificial intelligence and machine learning, connected products and Internet of Things, crew/workers geo-location, wearable support, and a modern customer user interface. PTC Servigistics is made up of four modules: Service Parts Management, Service Parts Pricing, Connected Service Parts Management, and Performance Analytics and Intelligence.

Quick facts about PTC include:

- **Number of employees:** 7,000
- **Total number of aftermarket and service parts planning clients:** 3,500+
- **Globalization:** Users in 100+ countries and support for 13+ languages
- **Industry focus:** Aerospace and defense, automotive, consumer products, farm, construction and industrial machinery/equipment, healthcare, high tech, oil and gas, process industries, retail, services, telecommunications, and utilities

Strengths

- **Multi-echelon optimization for complex needs:** PTC supports multi-echelon optimization designed for the aftermarket that can simultaneously optimize parts at every location at once. PTC has domain knowledge in service parts planning with over 2,000 years of combined experience within its dedicated team. PTC incorporates an accurate model of the service supply chain, a global optimization with customer-focused targets, and comprehensive scenario-based what-if modeling. The offering can optimize availability/product uptime, multi-period, budget, sustainability objectives, space constraints, referral location, churn control, dealers/retail inventory, contract type, multi-indenture, and rotables. PTC can support both complex and simple parts planning needs but has expertise in the complex specifically for industries like automotive, industrial equipment, high tech and medical devices, complex asset OEMs, commercial aviation, and defense aviation.
- **Technology advancements, innovation accelerators, and dedication to R&D:** PTC has monthly meetings with its customer council to share best practices and to identify opportunities for product enhancements. PTC has invested heavily in R&D and dedicated resources specifically to enhance service parts planning activities. Innovative technology capabilities in Internet of Things, machine learning, big data, simulation, predictive analytics, sustainability, integrated business planning, and artificial intelligence are transforming the service parts planning offering. PTC supports highly complex service supply chain needs for its customers with the ability to leverage its ThingWorx platform to better plan for future service demand based on connected product data. PTC recognizes that service parts planning is a set of activities that are fertile ground for innovation and should be the foundation for delivering quality service outcomes.

Challenges

- **Singular use case priorities:** The primary challenge for PTC is with regard to service organizations that solely want to improve a siloed process with their operation. Service parts planning is a seemingly siloed process, but its utility should positively impact across the service supply chain. But too often the decision makers that are in charge of service parts planning focus on isolated improvements as opposed to a servicewide or enterprisewide

solution. PTC has the core functionality to address siloed focus on service parts planning, but the value of the offering is enhanced greatly by a more end-to-end service approach.

Consider PTC When

Aftermarket service organizations should consider PTC when searching for a technology partner that has a depth of capability, resources, and domain knowledge in service parts planning. PTC has a proven track record of innovation and technological advancement in support of service parts planning and broader capabilities within the service life cycle. Through organic and inorganic growth, PTC has helped its customers optimize the service parts planning function to meet the needs of an ever more complex service environment.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

The eight service parts planning and aftermarket technology companies evaluated in this IDC MarketScape provide strategic vision and support for a wide set of capabilities for service organizations across a variety of industries. All vendors in this study were assessed in the Leaders or Major Players categories based on their respective ability to address end-to-end processes to execute on service parts planning needs. Each vendor supported multiple use cases and complexity within service parts planning.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

This study assesses the capability and business strategy of many notable service parts planning technology vendors.

Please keep in mind the following definitions:

- Service parts planning is defined by IDC as the planning, forecasting, and positioning of spare parts across the service network (including inventory, field service van stock, depots, and customer/dealer locations).
- Servitization is defined by IDC as product as a service. This includes selling usage, uptime, power by the hour, remote monitoring, and service analytics.
- Digital business is defined by IDC as a business where value creation is based on the use of digital technologies, including internal and external processes, how an organization engages with customers, citizens, suppliers, and partners; how it attracts, manages, and retains employees; and what products, services, and experiences it provides. Digital transformation is not over, we have just shifted to running a digital business.
- Service parts management (SPM) is defined as the management of service parts for the execution of a work order including planning, forecasting, pricing, returns, repair, recalls, and refurbishment of service parts.
- Service supply chain control tower is defined as a dashboard including data, key metrics, and events across the service spare parts supply chain enabling organizations to more fully understand, prioritize, and resolve critical issues in real time. Tools provide visibility to make data-driven decisions and execute actions across functions and partners within the network to optimize operations.

LEARN MORE

Related Research

- *IDC MarketScape: Worldwide Service Life-Cycle Management Platforms 2023-2024 Vendor Assessment* (IDC #US49989623, October 2023)
- *IDC FutureScape: Worldwide Supply Chain 2024 Predictions* (IDC #US50873823, October 2023)
- *IDC FutureScape: Worldwide Manufacturing Product and Service Innovation 2024 Predictions* (IDC #US50873723, October 2023)
- *Market Analysis Perspective: Worldwide Aftermarket Services Strategies Applications, 2023* (IDC #US51164723, August 2023)
- *2023 Product Innovation and Aftermarket Services Global Survey* (IDC #US51035223, July 2023)

Synopsis

This IDC study uses the IDC MarketScape model to provide an assessment of technology vendors participating in service parts planning.

"The ability to resolve an asset or equipment issue often depends on having the right service parts at the time of need," says Aly Pinder, research vice president, Aftermarket Services Strategies, IDC. "Too often service parts planning is considered an afterthought but this aspect of the service life cycle is

becoming more critical as the complexities within the service network expand. Service organizations need to better plan and prepare for future service demand to avoid extended downtime or unmet customer SLAs."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

Global Headquarters

140 Kendrick Street
Building B
Needham, MA 02494
USA
508.872.8200
Twitter: @IDC
blogs.idc.com
www.idc.com