IDC MarketScape

IDC MarketScape: Worldwide SaaS CMMS Application 2021 Vendor Assessment

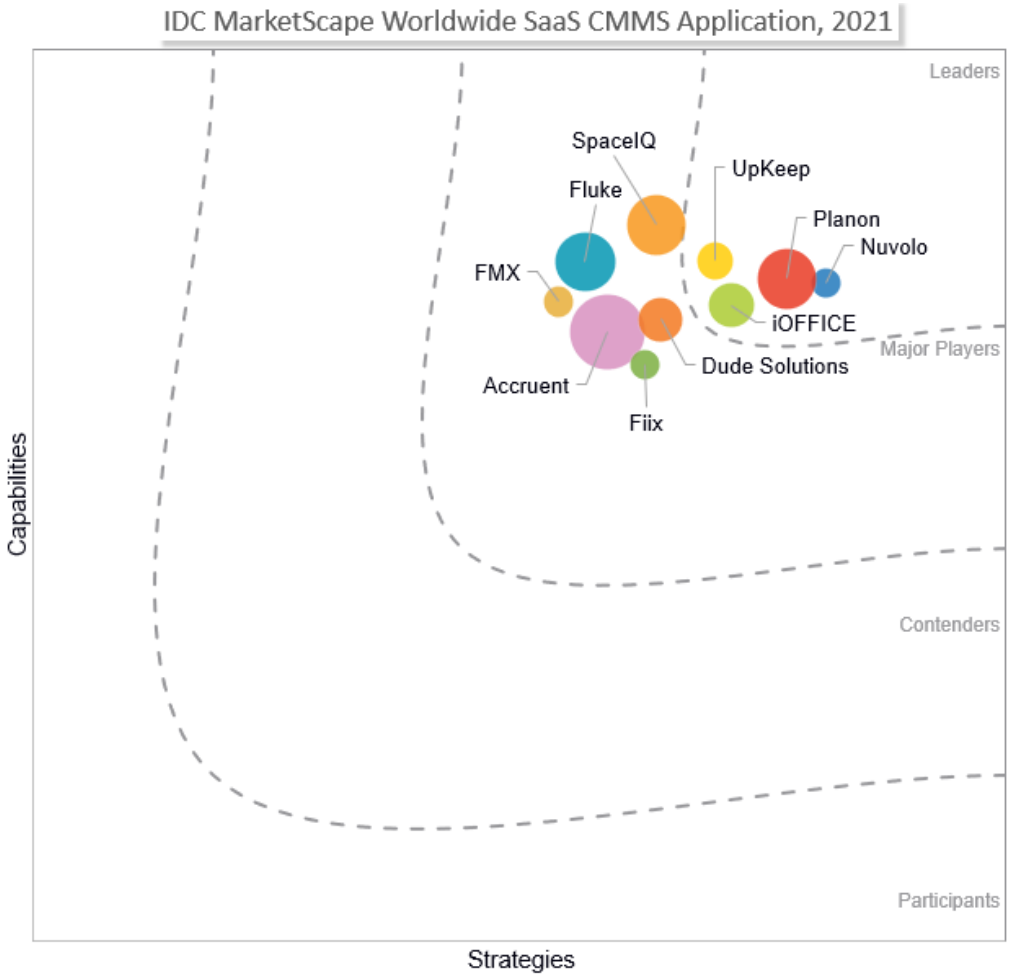
Juliana Beauvais Mutaz Shegewi Matthew Leger

IDC MARKETSCAPE FIGURE

THIS IDC MARKETSCAPE EXCERPT FEATURES NUVOLO

FIGURE 1

IDC MarketScape Worldwide SaaS CMMS Application Vendor Assessment



Source: IDC, 2021

August 2021, IDC #US47985421e

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

IDC OPINION

The intent behind a computerized maintenance management system (CMMS) is to automate, improve, and ultimately anticipate maintenance needs. This IDC MarketScape helps organizations evaluate the CMMS application market landscape. It is a competitive market, and buyers have their pick of vendors.

From the product perspective, any system an organization considers should have reactive, planned, and condition-based maintenance capabilities. Depending upon how you will use the system, IDC suggests looking at additional functionality for spare part inventory, vendor management, work scheduling, inspections, and reporting. Organizations must also think about key areas that distinguish SaaS CMMS application vendors today, which are relationship building, configurability, mobility, location intelligence, predictive maintenance, and vision.

Relationship Building

SaaS turns a CMMS software deployment into a multiyear relationship. Purchase decision makers should look for a vendor that feels as much a cultural fit for their organization as a technical fit. Many customer references talk about whether they trust the vendor to deliver on their promises and provide the best experiences. Some end users expressed delight with the little things that their customer success manager does for them or when a random feature that they requested shows up on the product road map. Often, it comes down to the commitment and expertise of the vendors' staff, how they guide customers during and after implementation to avoid common pitfalls, and the way they treat customers when it's time for renegotiating contracts.

Configurability

Applications should readily conform to an organization's workflows, nomenclature, and roles. Organizations should have the ability to quickly modify existing fields, add new fields, and rearrange fields on different views, as well as report on custom data points. Further, a modern CMMS provides mechanisms for altering out-of-the-box workflows, such as defining approval processes, generating email alerts, and sending invoices to a financial application. Purchase decision makers should evaluate how much can be configured via the user interface or low-code tools without writing custom code. When a system is truly configurable, all customers can be on the same code base, but still have the product work the way they want. Otherwise, organizations end up adjusting procedures to fit a rigid application or paying ongoing professional services fees to customize and maintain workarounds. In fact, these are two of the main reasons customers gave for being dissatisfied with a CMMS application.

Mobility

Mobile is increasingly important because technicians want to complete everything onsite and not have to return to a desk at the end of the day to key in data. Further, the COVID-19 pandemic imposed physical restrictions that quickly drove organizations to more remote maintenance operations. Five years ago, most customers wanted a simple mobile maintenance app for technicians to open, assign, and close work. Now technicians want the option to do almost everything they can do on a computer on a mobile device as well, but still have it be easy to use. Initially, this favors vendors that mobile enabled their SaaS product for access on any device because new features are automatically

available. Greater investment in mobile experiences will be a strategic imperative for vendors in this area as more and more activities go remote.

Location Intelligence

One emerging frontier is the integration between maintenance systems and location-related external data and location intelligence analytics. Knowing and using the location of a technician, asset, work order, or issue adds rich context to the preservation of physical assets and equipment. Potential digital transformation use cases include assigning work to the nearest technician, tracking the location where an asset is deployed, and overlaying 3D models with real-time location information. For example, technicians can use an indoor wayfinding to navigate to points of interest or geospatial visualizations to understand areas impacted by outages or natural disasters. There are exciting possibilities but also challenges with privacy and cultural acceptance. Organizations will want to harness the promise of location intelligence while not letting the potential get ahead of the practical.

Predictive Maintenance

Many vendors promote predictive maintenance when they actually deliver what IDC classifies as condition-based maintenance. With condition-based maintenance, companies can monitor certain real-time data from IoT endpoints, such as runtime, temperature, or pressure. Then the maintenance team defines rules to automatically trigger work orders when data is outside acceptable thresholds. This delivers significant productivity gains for organizations still relying on reactive and time-based planned maintenance and is a valuable step in advancing maintenance operations. Predictive maintenance goes to the next level and applies artificial intelligence (AI) and machine learning (ML) algorithms to a range of historic and live data points to create models. Maintenance software then anticipates events such as when equipment is likely to fail, downtime may occur, or spare parts will run out. Going one step further, vendors are exploring making recommendations or automating actions based on predictive models. This is certainly an area to watch as CMMS vendors take a page from enterprise asset management (EAM) application providers already making inroads in predictive maintenance.

Vision

This IDC MarketScape evaluates the vendors, not just their products. CMMS vendors are fairly close together on their capabilities but vary on their strategies (refer back to Figure 1). Some are effectively leveraging partnerships and a broader ecosystem to bring more value to customers, while others are building predictive analytics, doubling down on IoT, or updating their cloud architecture and delivery. The road maps and strategies shared with IDC demonstrated a wide range of what vendors believe customers will prioritize in the future. A product road map is a set of commitments to customers and a statement about where the software provider is focusing its energy. While many vendors are hitting on a few key areas, only some are pulling it all together in a comprehensive and compelling vision. This is one differentiator between vendors in the Major Player versus Leader category.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The vendor inclusion list for this evaluation was selected to accurately depict the vendors that are most representative of any given CMMS application on buyer's selection list based on the following:

- The vendor must have a SaaS cloud offering – on premises-only applications are out of scope.

- The CMMS application can be purchased separately (not only functionality built into a larger system) and is available off the shelf without required customization.
- The vendor has a minimum of one CMMS application in market for at least three years.
- The vendor had 2020 revenue in at least two geographic regions.
- The vendor had at least $10 million ARR in CMMS software revenue at the end of 2020.
- At least 25% of the vendor's maintenance application revenue comes from healthcare, manufacturing, or other asset-intensive industries primarily using the software for asset and equipment management.
- The CMMS has functionality for work order management, reactive maintenance, preventative maintenance, MRO inventory, resource scheduling, and vendor management.

ADVICE FOR TECHNOLOGY BUYERS

CMMS applications are evolving rapidly as vendors invest research and development dollars into bolstering, augmenting and, in some cases, redesigning their software. As a result, it is extremely important for end users to understand how vendors and their software are positioned currently as well as how a CMMS may be situated in the next three to five years. Organizations typically make a multiyear commitment to their CMMS applications because the investment to migrate the data, configure workflows, integrate with adjacent systems, and train a broad user base is high. Thus it is vital to evaluate the software vendor's strategy, road map, and responsiveness to customer feedback in addition to the vendor's present features and functionality.

Innovation is an essential part of the "buy" decision, so a guiding factor in our vendor research was the 3rd Platform and innovation accelerator current capabilities in addition to the strategic direction. Buyers are looking for a technology partner that can rise to the complex, agile, and remote demands of today, as well as take them into the future. Several vendors outlined in this study have focused their CMMS on specific manufacturing and industrial verticals, while others serve organizations across many industries such as healthcare, education, and public sector clients. The vendors vary in terms of size, experience, levels of support, sales model, and focus on the market. Ultimately, it is about finding the vendor that best suits your needs, sets reasonable expectations, and delivers on them with professionalism and accountability.

Following are a few key steps in the journey to select the right fit among the myriad of software vendors:

- **Plan with the end in mind.** Before you choose your CMMS vendor and product, you should first take the opportunity to do some self-reflection. Consider the effectiveness of your maintenance processes and prioritize features that are mission critical. A few key questions to ask regarding the internal factors involved in choosing software are:
  - What is our strategy for managing and maintaining assets and equipment?
  - Are we looking to better define our processes as we implement new technology?
  - What aspects of maintenance management do we want to digitally transform first, and what features do we consider essential now?
  - How has the COVID-19 pandemic changed or restructured our business?
  - What industry-specific considerations apply to our software selection?

    - How many and what types of users will interact with the software, including consideration for ways in which third-party contractors will interact with the application?
    - How much are we willing to spend on the software?
    - What are the organization's internal support resources and capabilities?
- **Develop a decision-making framework for success.** With so many options, organizations must take a systematic approach to researching and vetting software packages. Tap into the vast web of software evaluation options including market research firms, online review sites, and industry associations. A few key questions to ask when researching the software are:
    - Does the vendor have experience in successfully implementing a CMMS in our industry and company size?
    - Is the vendor knowledgeable about applicable regulations and guidelines, both locally and globally, as they affect our company?
    - What levels of support are available, and can the vendor or partners support all the geographic regions where we operate?
    - Is the ROI achievable? Does the vendor have a track record of meeting the ROI requirements?
    - Can the vendor integrate with our organization's other IT systems?
    - What mobile capabilities does the vendor offer for the different user groups?
    - What purchasing, pricing, and cloud deployment options does the vendor offer?
    - How long does it take to implement the software? How quickly can we start using the product?
- **Look toward an agile future.** Maintenance management teams are adopting more innovation for efficiency, autonomy, and competitive advantage. Organizational agility is critical when purchasing software as the applications and vendors must be able to scale up and down to support your changing maintenance operations. A few key questions to ask when considering growth aspect of choosing a software package are:
    - Is the product updated frequently enough for our needs?
    - Does the vendor currently offer or have concrete plans to support IoT and AI-based predictive maintenance that will anticipate asset failures and make recommendations?
    - What new innovations is the vendor offering or considering, especially with regard to mobility and location-based services?
    - How will the vendor's strategic investment outlook for the next three to five years impact our business?
    - In what ways does the vendor engage with, listen to, and communicate with its customers and where is customer feedback incorporated in the product road map?
    - Will the vendor be a partner, helping our business grow now and in the long term?

This IDC MarketScape vendor assessment assists in answering the aforementioned questions and others. The goal of this document is to provide potential software customers with a list of CMMS vendors that have taken great strides to incorporate the previously listed capabilities. We have profiled and assessed their capabilities and strategies to support the broad needs of a CMMS application.

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.

Nuvolo

After a thorough evaluation of Nuvolo's strategies and capabilities, IDC has positioned the company in the Leaders category in this IDC MarketScape for worldwide SaaS computerized maintenance management system applications.

Nuvolo, founded in 2014, automates work order management, preventative maintenance, spare parts inventory, and inspections. Nuvolo has capabilities to manage vendors, warranties, and regulatory compliance across a variety of industries, especially healthcare, life sciences, and food retail. Nuvolo offers a configurable application, which includes mobile technician and field service management functionality for workload balancing, scheduling, and route optimization. In addition, Nuvolo enables live asset tracking and extends its CMMS capabilities with OT cybersecurity for protecting connected non-IT devices. Nuvolo's application is a single system and code base, built from the ground up on ServiceNow's NOW platform. Nuvolo received Series C funding in March 2021 and is investing in product development, expanding its staff and offices globally, and partnerships with Deloitte, Accenture, and Fujitsu.

Quick facts about Nuvolo are as follows:

- **Company location:** Headquartered in Paramus, New Jersey, with seven offices globally
- **Company size:** 300 employees overall
- **Globalization:** Deployed in over 50 countries and available in 22 languages
- **CMMS partners:** 33 partners globally
- **CMMS SaaS customers:** 160 direct accounts
- **CMMS industry focus:** Healthcare, life sciences, technology, manufacturing, logistics, retail, oil and gas, government, higher education, and service providers
- **Ideal CMMS customer size:** Upper midmarket to large enterprises with 2,000 or more employees
- **Cloud:** Single-tenant public cloud, where each client has its own instance, hosted by ServiceNow
- **Mobile:** Native mobile apps for Android and iOS at no additional charge, with all online capabilities available offline
- **Pricing model:** Annual SaaS subscription based on consumption-based pricing models — number of users (people performing work in Nuvolo), number of sites, or number of employees

Strengths

- **Configurability:** Because it is built on the NOW platform, organizations can configure Nuvolo to handle almost every need with custom fields, forms, and workflows, as well as asset hierarchies and dependencies. The system can be reconfigured in minutes to respond to rapidly changing situations. Built natively on a single platform, Nuvolo avoids the difficulties of integrating acquired products and keeps professional service fees relatively low.

- **Field service management:** In addition to CMMS functionality, some field service management capabilities are included in the Nuvolo application at no additional charge. Features include dispatching, viewing work orders on a map, driving directions, scheduling, and scoring technician ability to complete the work order based on factors such as location, technician certifications, experience, and skill sets.
- **Customer success:** Nuvolo exceeds customer expectations for several points on the customer journey. Customers comment that the licensing and contract negotiations are straightforward and flexible. Nuvolo helps with migration to its system, with one customer noting that the vendor carried over 250,000 records from its previous application. Further, all customers receive 24 x 7 support included with the software subscription for the contract duration.

Challenges

- **Application speed:** Customers note that the Nuvolo application occasionally performs slowly, especially when running reports. Because Nuvolo is hosted on ServiceNow cloud infrastructure, there is only so much it can do to impact performance, such as archiving records and optimizing its code. Nuvolo should continue communicating to customers what it means to be built on the NOW platform and potential advantages from using Nuvolo alongside ServiceNow for other workflow types.
- **Industry workflows:** Because Nuvolo is designed to be a highly configurable application on a workflow management platform, some customers note that it requires significant time to set it up for their industry and specific organization. Further, it can take more internal resources to maintain and handle product releases. While this gives great control to organizations, some users wish there were more out-of-the-box industry workflows.
- **Competitive market:** Nuvolo is a relatively new entrant in a busy CMMS market. Customers can choose from a selection of asset-intensive EAM software vendors and purpose-built cloud maintenance applications. Nuvolo will need to keep pace with its rigorous product road map to service a broader and more comprehensive set of asset life-cycle needs.

Consider Nuvolo When

Consider Nuvolo if you are a large enterprise or midmarket business. You are likely looking for a configurable CMMS with field service management capabilities. You might also consider Nuvolo if you are already using ServiceNow.

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.

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

A computerized maintenance management system (CMMS) manages an organization's maintenance, repair, and overhaul (MRO) operations for its physical assets and equipment. A CMMS application often includes capabilities to digitally automate work order management, reactive maintenance, preventative maintenance, inspections, spare parts inventory management, vendor management, and warranty tracking.

LEARN MORE

- *Worldwide Enterprise Asset Management Applications Market Shares, 2020: Pandemic Accelerates Cloud Adoption* (IDC #US47986321, June 2021)
- *Worldwide Enterprise Asset Management Applications Forecast, 2021-2025* (IDC #US47986421, June 2021)
- *Digital Transformations for Mobile Field Service and Maintenance Management* (IDC #US47649721, May 2021)
- *Five Mobile Workforce Trends for Field Service and Enterprise Asset Management* (IDC #US47638821, May 2021)
- *Why Trust Is an Enterprise Application Differentiator* (IDC #US47126621, April 2021)
- *IDC Market Glance: Facility Management Software, 2Q21* (IDC #US47125421, April 2021)
- *IDC MarketScape: Worldwide Integrated Workplace Management System 2020-2021 Vendor Assessment* (IDC #US46261420, December 2020)
- *IDC MarketScape: Worldwide SaaS and Cloud-Enabled Asset-Intensive EAM Applications 2020-2021 Vendor Assessment* (IDC #US46261320, November 2020)

Synopsis

This IDC study provides an assessment of prominent computerized maintenance management system (CMMS) vendors and discusses what criteria are most important for companies to consider when selecting a CMMS application.

"Because SaaS turns a CMMS software deployment into a multiyear relationship, organizations should look beyond product functionality and evaluate a vendor's customer engagement, ecosystem approach, cloud delivery, strategic road map, and overall vision," says Juliana Beauvais, research manager, Enterprise Asset Management and Smart Facilities at IDC. "Ultimately, it is about finding a vendor you trust to deliver on its commitments. Look for a vendor that feels as much a cultural fit for your organization as a technical fit."

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. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

Global Headquarters

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