

## IDC MarketScape

# IDC MarketScape: Worldwide SaaS and Cloud-Enabled Operational ERP Applications 2019 Vendor Assessment

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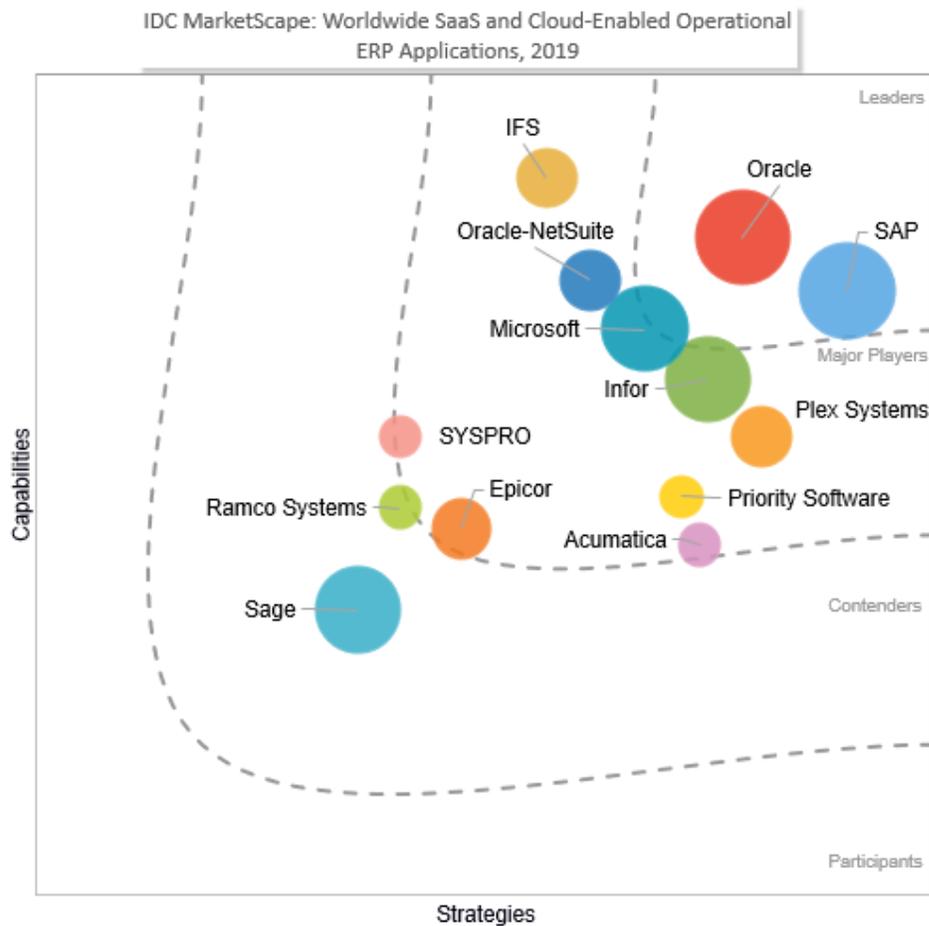
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**THIS IDC MARKETSCAPE EXCERPT FEATURES SAP**

### IDC MARKETSCAPE FIGURE

**FIGURE 1**

## IDC MarketScape Worldwide SaaS and Cloud-Enabled Operational ERP Applications Vendor Assessment



Source: IDC, 2019

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

## IN THIS EXCERPT

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The content for this excerpt was taken directly from IDC MarketScape: Worldwide SaaS and Cloud-Enabled Operational ERP Applications 2019 Vendor Assessment (Doc # US43702818). 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

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### Digital Transformation Driving Change

Digital transformation (DX) is fundamentally changing enterprise resource planning (ERP) applications – allowing businesses to transform their decision making, which is enhancing their business outcomes significantly in the digital economy. Digital transformation is an enterprisewide, board-level strategic reality for companies wishing to remain relevant or maintain or enhance their leadership position in the digital economy. Digitally transformed businesses have a repeatable set of practices and disciplines used to leverage new businesses, 3rd Platform technologies, and operating models to disrupt businesses, customers, and markets in pursuit of business performance and growth. DX is driving businesses to rethink their technology strategy, and that includes moving beyond their legacy ERP and back-office systems.

### *SaaS and Cloud-Enabled Software Driving Investment*

Instead of continuing to invest in antiquated on-premises systems, smart DX businesses have turned their focus to SaaS and cloud-enabled software because they need flexible and agile financial applications that are relatively easy to implement, configure, and update. Demand for cloud-based ERP applications continues to grow because of the ability to access and analyze massive amounts of data in near real time. With speed as a guiding factor to winning business globally, businesses want and need more from their ERP systems than ever before, and that includes using the most up-to-date and advanced systems found in SaaS and cloud-enabled ERP systems. SaaS and cloud-enabled ERP systems enable growing businesses to quickly expand into new regions around the globe without making major investments into their technology infrastructure because they are extremely adaptive to accelerated rates of change. SaaS and cloud-enabled systems are adaptive to dynamic operations environments, which is why this IDC MarketScape for SaaS and cloud-enabled operational ERP applications is extremely important as a technology vendor guide for today's COO, CFO, CIO, and IT buyer.

### *Operational ERP*

Operational ERP includes product-centric organizations in industries such as manufacturing, distribution, and retail. These organizations' ERP systems incorporate operational modules, including order management, finance, procurement, enterprise asset management (EAM), manufacturing, and supply chain, to maximize operational efficiencies. These organizations see benefits from the integration between core finance and operational capabilities so that operational transactions with a financial impact are reflected directly in financial modules. In today's fast-paced global business environment, successfully managing the operation's processes to meet the organization's financial

obligations is essential. Moreover, as the digital economy continues to develop the organization, the finance, manufacturing, supply chain, sales, and asset management functions will play a larger forward-facing role – interacting with clients and customers. The operations of an organization can be complex and fraught with inefficiencies for companies of all sizes. During our interactions with finance, various operations, and IT professionals, the following issues were top of mind:

- **Key metrics:** Productivity improvements from shop floor to supply chain to enterprise end-to-end business processes were critical. In addition, inventory accuracy, booked versus billing ratios, and customer on-time deliveries were the metrics mentioned the most in the operational ERP systems tract.
- **Manual processes:** Today, there are still thousands of companies of all sizes with many manual workflows. As a result, the operational and financial processes used to run the business become exceedingly inefficient – consuming precious resources and returning delayed approvals, with a multitude of errors. Moreover, manually driven processes within operations can lead to inflexibility and a lack of agility, which can be extremely harmful to a company's ability to maneuver in the increasingly dynamic digital economy.
- **Visibility issues:** Operations and finance executives do not have time to retrace their steps in an effort to find lost transactions and errors and/or verify previous transactions. This leads to operational resources spending extra time looking backward instead of at current information and modeling it for the future for the best possible outcomes.
- **Resource constraints:** In many growing companies, operations professionals are being asked to do more with less, and in many cases, legacy systems add to the workload instead of reducing it. In the age of digital, employees need to rely on their technology systems to do more so they can spend more time modeling, predicting the future, and bringing better business outcomes.
- **Lost money:** Companies with inefficient operational and financial processes not only risk doing damage to their reputations, but they also often lose opportunities to take advantage of early payment discounts, cost savings, and efficient processes.

Operational workflows are quickly changing as part of digital transformation initiatives. This shift brings forth a new chapter in the evolving story of operational ERP applications. The new chapter within operational ERP software applications will be characterized by the following:

- **Robots:** Robotic process automation (RPA) is another technological tool that is driving the digital transformation for business workflows. With RPA, employees will be better able to cope with the demands of forecasting, error reconciliation, approval/exception resolution, and data reporting.
- **Rise of machine learning (ML):** Recently, companies have turned to structured machine learning to speedup/streamline key financial processes such as matching, invoice reconciliation, transaction processing, and compliance. In addition, early adopters of machine learning have been able to eliminate a large amount of time spent on manual tasks while also decreasing the error rate of these same tasks.
- **Embedded intelligence:** Roughly 80% of today's operations' professional time is spent on lower-level tasks like manual matching of receipts, invoices, purchase order, and inventory tagging. Artificial intelligence (AI) is being used to automate many of these lower-level tasks – freeing up valuable organizational resources to focus on higher-level strategic tasks.

The goal of this document is to provide potential software customers with a list of operational ERP software companies that have taken great strides to address the challenges listed previously. We have profiled and assessed their capabilities to support the complicated area of operational ERP.

## IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

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Through its clients and contacts across most industries, IDC frequently has unique visibility into vendor selection processes within many companies. The vendor inclusion list for this document began with those SaaS and cloud-enabled operational ERP solutions that IDC was familiar with having been evaluated for selection within recent operational ERP deals. IDC then supplemented those solutions with several additional ERP vendors that it believed also provided qualifying operational ERP systems. Vendors were then surveyed and further investigated to ensure that their operational ERP systems qualified as SaaS or cloud enabled and were already serving clients. Ultimately, all operational ERP solutions included in this document met these criteria.

After an initial evaluation of software vendors serving this market, which included each vendor's high-level application capabilities and existing operational ERP client base, IDC's Enterprise Applications team extended formal invitations to software vendors to participate in our study.

All vendors actively participated in the research, with a total of 42 references contacted and interviewed. Discussions with references included the systems utilized and their perception of the vendor and software in terms of technical support, account management, marketing message, level of value delivered versus price paid, ease of integration, user interface (UI), innovation, intelligent workflows, and ROI. In addition, references also provided information on the areas of technology improvement they would like to see from the vendor, their future business requirements, and their top 3 metrics.

## ADVICE FOR TECHNOLOGY BUYERS

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SaaS and cloud-enabled operational ERP technology is evolving with functionality improvements occurring as often as daily. From the addition of the 3rd Platform with Big Data and analytics, social, and mobile to the innovation accelerators of cognitive, 3D printing, robotics, Internet of Things (IoT), and advanced security, the systems continue to advance and improve at warp speed. Speed is the critical factor as in the digital economy, enabling businesses to significantly improve in terms of market share, revenue, and profitability. It is recommended that companies understand the current capabilities of their technology choices, along with the strategic direction and investment their operational ERP software provider is making now and in the next three to five years. A guiding factor in our vendor research was the 3rd Platform and innovation accelerators' current capabilities and their strategic and investment direction. It is critical that buyers look for a technology partner they can trust and that can take them well into the future.

As SaaS and cloud-enabled operational ERP systems have increased in popularity, so too has the requirement for companies to utilize an ERP system regardless of their business size. Large enterprises find operational ERP systems enable visibility across the entire organization from customers through to suppliers. But just as important are small and midsize organizations using operational ERP systems. Many large enterprise CFOs and CIOs move to small and medium-sized business (SMB) and need an ERP package they are accustomed to but at a fraction of the cost. The executives of small and midsize organizations want to move beyond spreadsheets and databases to

SaaS and cloud-enabled operational ERP software because it is an integrated, real-time business system that is always accessible and grows with the business. Last, organizations vary in products and require innovation to move beyond the current state into the intelligent enterprise world. SaaS and cloud-enabled operational ERP systems are the critical core to build intelligent systems, which use machine learning and natural language processing (NLP) on curated data sets, with advanced analytics and an assistive user interface across the resources of people, process, and technology. These intelligent ERP (i-ERP) systems forecast, track, learn, route, analyze, predict, report, and manage business decisions and outcomes. Many of the vendors in this IDC MarketScape have already invested in the 3rd Platform and innovation accelerators, utilizing these innovation areas to deliver higher value to their customers, while others are just beginning this investment journey. Several vendors outlined in this research study have more operational depth and breadth in manufacturing and supply chain. And some are still moving from on-premises to single tenancy and just beginning their journey toward multitenancy. Before making purchasing decisions on SaaS and cloud-enabled operational ERP software, businesses should consider:

- Does the vendor have experience with my type of product, company size, and operation's requirements?
- Is the vendor knowledgeable about operational ERP requirements as they affect my company and industry?
- Does the vendor understand the regulations that will impact my business? How are these regulations reflected in my current technology, and how will it change in the future?
- What levels of support are available, and are they geographically available for my business?
- What are my internal support resources and capabilities?
- Should I hire a third party to plan and assist with the implementation of the operational ERP solution?
- Is the vendor financially able to provide needed support? Can the vendor support needed investment in the development of future operational ERP software requirements?
- Is the vendor committed to this market for the long term?
- Is the ROI achievable? Does the vendor have a track record of meeting the ROI requirements?
- Can the vendor or partners support my foreign operations?
- Can the vendor integrate with my company's other IT systems and those of my partners?
- Is the product available anywhere and anytime?
- Is the product updated frequently enough for my business needs?
- What new innovations is the vendor considering, investing, and tied to with its road map? How and when will it impact my business?
- What is the vendor's strategic investment outlook for the next three to five years? Why?
- Will the vendor be a partner, helping my business grow now and in the long term?

This IDC MarketScape vendor assessment assists in answering these questions and others. Some of the references that participated in this study noted that the current state of the SaaS and cloud-enabled operational ERP software market is evolving. In addition, many of the references were impressed that there are now more vendor choices within the operational ERP market. IDC expects that some consolidation and specialization by niche may occur as the market matures and as operational ERP software vendors look to add additional capabilities to their portfolio of products.

## VENDOR SUMMARY PROFILES

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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.

### SAP

After a thorough evaluation of SAP's strategies and capabilities, IDC has positioned the company in the Leaders category within this 2019 IDC MarketScape for worldwide SaaS and cloud-enabled operational ERP applications.

SAP S/4HANA Cloud is an intelligent ERP that enables business processes including idea to design, procure to pay, plan to production, order to cash, offer to project, and core finance. From a line-of-business perspective, this includes finance, procurement and sourcing, research and development, sales, revenue, supply chain, and manufacturing.

Quick facts about SAP:

- **Employees:** 96,000
- **Total number of clients:** 425,000
- **Globalization:** 63 country localizations and 39 languages
- **Industry focus:** Automotive, engineering, construction, mill-products (multiple industries), mining, research and development, chemicals, high tech, mill paper and packaging, professional services, retail, wholesale and distribution, consumer products, industrial machinery and components, mill-metal, public sector (multiple industries), and utilities
- **SaaS:** Multitenancy on the application, database, and infrastructure layers
- **Pricing model:** Perpetual and subscription
- **Largest customer:** Largest customers support 5,000 users
- **Partner ecosystem:** Over 180,000 partners globally
- **Interesting stat/fact:** The acronym SAP stands for Systems, Applications, and Products in data processing. The SAP acronym was derived from the original German name, which was Systemanalyse und Programmentwicklung.

### Strengths

- **In-memory database:** SAP S/4HANA Cloud has a single in-memory, columnar data model for both transactions and analytics, eliminating redundant data and providing real-time insight, tied to AI-powered set of functionalities within ERP to automate routine work and flag exceptions for human action, with a strong commitment to automating half of all ERP activities in the next three years.
- **Conversational UI:** A hands-free, conversational user experience with an intelligent digital assistant for the enterprise, SAP CoPilot.
- **One:** SAP has one code line, one data model, and one user experience for both cloud and on-premises deployments, making it easier and cheaper for companies to manage hybrid scenarios.

## Challenges

- **Customer support:** References noted live interaction for customer support is not always available, hurting customer satisfaction. The ticket system in place makes one reference a little wary about any critical issues it may experience.
- **Implementation:** References indicated that implementation of SAP can be a daunting project if not prepared – a common issue encountered is if there are customizations needed by a customer.
- **Perception of cloud:** Manufacturers tend to be slower to overcome their fear and hesitation to rely on cloud technology. There is also a general lack of understanding around the nuances of SaaS, including the subscription pricing model, continuous updates versus upgrades, and configuration versus customization. SAP references listed cloud adoption as a concern for them before adoption, but now prefer the regular updates to derive more functionality/value.

## Consider SAP When

Consider SAP if you are a manufacturing company looking for a well-established operational ERP system focused on utilizing artificial intelligence to optimize business processes.

## APPENDIX

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### 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

This IDC MarketScope evaluation focuses on SaaS and cloud-enabled operational ERP solutions. ERP is a packaged integrated suite of technology business applications with common data and process models that digitally support the administrative, financial, and operational business processes across different industries. These processes manage resources including some or all of the following: people, finances, capital, materials, suppliers, manufacturing, supply chains, customers, products, projects, contracts, orders, and facilities.

This IDC MarketScope evaluates ERP technology with an operational slant. The IDC operational ERP definition includes product-centric organizations in industries such as manufacturing, distribution, and retail. These organizations' ERP systems incorporate operational modules, including order management, enterprise asset management (EAM), manufacturing, and supply chain, to maximize operational efficiencies. These organizations see benefits from the integration between core finance and operational capabilities so that operational transactions with a financial impact are reflected directly in financial modules.

Typically, ERP solutions are architected with an integrated set of business rules and metadata, accessing a common data set (logical or physical) from a single, consistent user interface. Operational ERP solutions are available as on-premises, hybrid and, increasingly, cloud SaaS deployments.

### *The Role of Technology in Operations*

Technology is critically important within operations. From transactions to operations to compliance, to savings and discounts to inventory management and cash flow, technology is a critical resource for the organization. Operational ERP touches upon:

- Purchase orders
- Customer orders
- Invoicing
- Inventory
- Products
- Assets
- Suppliers
- Payments
- Customers

## LEARN MORE

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### Related Research

- *IDC FutureScope: Worldwide Intelligent ERP 2019 Predictions* (IDC #US43262918, October 2018)
- *Worldwide Enterprise Resource Planning Software Forecast, 2018-2022: Cloud Leads the Way* (IDC #US43265918, July 2018)
- *SaaS and Cloud-Enabled ERP: The Perfect Storm to Move Beyond Legacy ERP and Spreadsheets* (IDC #US43703018, March 2018)

- *i-ERP (Intelligent ERP): The New Backbone for Digital Transformation* (IDC #US41732516, September 2016)

## Synopsis

This IDC study provides an assessment of the leading SaaS and cloud-enabled operational ERP software solutions and discusses what criteria are most important for companies to consider when selecting a system.

"It is imperative in today's fast-paced global business environment that organizations manage the operation's processes to meet the organization's financial obligations, and this includes product-centric organizations relying on operational ERP," states Mickey North Rizza, program VP, Enterprise Applications and Digital Commerce. "The SaaS and cloud-enabled operational ERP market is a mix of vendors with varying capabilities. It is critical that organizations select the right technology partner to help run the business for the long term."

## 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.

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