

## **IDC** MarketScape

## IDC MarketScape: Worldwide SaaS and Cloud-Enabled Operational ERP Applications 2022 Vendor Assessment

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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, 2022 Please see the Appendix for detailed methodology, market definition, and scoring criteria.

#### IN THIS EXCERPT

The content for this excerpt was taken directly IDC MarketScape: Worldwide SaaS and Cloud-Enabled Operational ERP Applications 2022 Vendor Assessment (Doc # US46733721). 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**

## **Digital-First World Creating More Value**

The digital-first world has arrived and with it comes a focus on digital-based capabilities in enterprise resource planning (ERP) systems. The automation of workflows, with innovation like artificial intelligence (AI), machine learning (ML), robotic process automation (RPA), natural language processing, and predictive analytics coupled with SaaS and cloud capabilities that enable anywhere and anytime access are enhancing the operational efficiencies of the organization. These new capabilities are improving the employees experience with greater insights, which can lead to better performance outcomes. IDC's September 2021 *Future Enterprise Resiliency and Spending Survey, Wave 8*, found that for 78% of organizations worldwide, the COVID-19 pandemic was the catalyst for shifting to a digital-first strategy. Further, the same study showed 87% of organizations are already engaged in executing their digital-first strategy. These digital transformation activities, according to IDC's December 2021 *Future Enterprise Resiliency and Spending* to IDC's December 2021 *Future Enterprise Resiliency and Spending* to IDC's December 2021 *Future Enterprise Resiliency and Spending* Survey, Wave 11, has led organizations to find 75-95% improvements in revenue, cost savings, profits, customer satisfaction, operational efficiency, employee productivity, and innovation, reducing business risk and enabled a faster time to market. It is clear the shift is on, away from archaic legacy systems to modern, modular, and intelligent ERP systems.

## SaaS and Cloud-Enabled Software Driving Investment

Instead of continuing to invest in antiquated on-premises systems, smart digital-first world businesses have turned their focus to SaaS and cloud-enabled software because they need flexible and agile ERP 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 and with anywhere anytime access. 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 2022 IDC MarketScape for worldwide SaaS and cloud-enabled operational ERP applications is extremely important as a technology vendor guide for today's COO, CFO, CIO, and IT buyers.

## **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, and manufacturing individuals, the following issue were top of mind:

- Key metrics: Productivity improvements from shop floor to supply chain to enterprise end-toend business processes are critical. In addition, inventory accuracy, booked versus billing ratios, and customer on time deliveries are the metrics mentioned the most in the operational ERP systems tract.
- Manual processes: Organizations still use manual processes. Even though our world has shifted to digital, organizations can't seem to get out of their own way. These manual methods are huge error buckets that can cause major business issues. Some of the issues identified by organizations prior to their move to SaaS and cloud-enabled ERP systems are numerous inaccuracies, an increase in organizational risk, inefficient and ineffective employees, and manual workflows that are a waste in energy, time, and costs. In addition, these issues 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 effort to find lost transactions, errors, and/or verify previous transactions. This leads to operational resources spending extra time looking backward instead of at current and realtime information so they can respond to the issues now.
- Resource constraints: In most growing companies, operations professionals are being asked to do more with less and, in many cases, the use of 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 answering the immediate needs, as well as modeling and predicting the future to bring better business outcomes.
- Lost money: Companies with inefficient operational and financial processes not only risk doing damage to their reputations but also often lose opportunities to take advantage of early payment discounts, cost savings, and efficient processes. This lost money will never be recovered, continuing to put a damper on the organizations efforts to move forward.

Operational workflows are quickly changing as part of digital transformation initiatives. The characteristics we found most in our research are:

- Robotic process automation: RPA is another technology tool that is driving the digital transformation for business workflows. With RPA, employees are better able to cope with the demands of forecasting, error reconciliation, approval/exception resolution, and data reporting.
- Machine learning: Companies have turned to structured machine learning to speed up/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: Artificial intelligence is being used to automate many lower-level tasks like invoice matching and similar transactional requirements – freeing up valuable organizational resources to focus on higher-level strategic tasks. In addition, this embedded intelligence is also providing great insights into the data so the organization can make better and faster decisions.
- Predictive analytics: Analytics are being used with the organization's lifeblood data to bring greater insight that is then allowing predictions to be made based on other criteria such as previous performance and actions.

- Modular and integrated systems: Many organizations are focused on modern and modular systems so they can integrate as needed with their other technology systems. The less issues with integrations because of APIs and microservices, the easier it is to consume the information within the business process.
- Anywhere, anytime access: Organizations we spoke with all agreed that SaaS and cloudenabled ERP systems allowed their organizations to work regardless of the pandemic. Some organizations told us while their working location may have changed, relying on their same systems helped them stay focused on the job at hand.

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 MARKETSCAPE VENDOR INCLUSION CRITERIA

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. In addition, at least 15% of the vendor's revenue should come from operational aspects tied to product-centric industries. Vendors must have a SaaS or cloud offering that was being used by clients – on-premises-only solutions are out of scope – and the vendor had won recent deals within the relevant customer segment. Also vendors needed to be able to support globally and have clients in at least two major geographic regions (North America, Latin America, EMEA, and APAC). Ultimately, all operational ERP solutions included in this document met these criteria.

All vendors actively participated in the research with multiple customer references being contacted and interviewed for each provider. 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 areas of improvement, their future business requirements, and top metrics.

## ADVICE FOR TECHNOLOGY BUYERS

ERP systems are evolving rapidly as vendors invest research and development dollars into bolstering, augmenting and, in some cases, redesigning their ERP applications. As a result, it is extremely important for operational organizations to understand how vendors and their software are positioned currently as well as how ERP solutions may be situated in the next three to five years. Investment decisions for an ERP system are going to be a long-term commitment, especially within operational industries, because of the costs, criticality of the system, and effort involved for implementation. Thus it is vital to evaluate the software vendor's strategy, road map, and responsiveness to customer feedback in addition to its present features and functionality. In addition, as the digital-first world continues to bring more innovation and digital accessibility, organizations must understand the need to utilize their systems quickly while also relying on them to do more than in the past. Systems that are easily integrated, in the cloud, and bring more innovation on a regular basis are in high demand.

Organizations are finding that the more they can respond and pivot their organization to handle the next crises the more control they have over their outcome, but all of this depends upon the underpinning of the right modern, modular, and intelligent ERP system.

SaaS and cloud-enabled operational ERP technology is evolving with functionality improvements occurring as often as daily. Speed is the critical factor in the digital economy, enabling businesses to significantly improve in terms of market share, revenue, and profitability. 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 that operational ERP systems enable visibility across the entire organization from customers through 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 organizations and need a holistic ERP package they are accustomed to but at a fraction of the cost. In addition, 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.

Before making purchasing decisions on SaaS and cloud-enabled operational ERP software, companies should ask or consider:

- Does the vendor have experience with my type of industry, product, and operational requirements?
- 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 the development of future operational ERP software requirements?
- Is the vendor committed to this market or industry 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 global operations?
- Can the vendor integrate with my company's other IT systems and those of my partners?
- Can the vendor integrate with my company's OT systems, connecting the shop floor with the top floor?
- 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 operations as a whole and 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?
- Who is on the vendor's ecosystem of partners? Do I already use them or will there be a need to in the future?

• Do we understand the change management that will occur and how to ensure we can manage it?

This IDC MarketScape vendor assessment assists in answering some of 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. Many organizations were concerned with the lack of speed to the cloud by some vendors and also the lack of innovation to enhance business processes and the employees' experience. Other references told us they love the new innovation pace, but they are still trying to come to terms with the update cycles within their own business.

IDC expects that some consolidation and specialization by niche providers may occur as the market matures and as operational ERP software vendors look to add additional capabilities to their portfolio of products. The point being, there are a lot of options when it comes to operational ERP, selecting the best vendor for your requirements is a challenging task, but one critical to long-term success in the digital-first world.

## **VENDOR SUMMARY PROFILE**

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape for worldwide SaaS and cloud-enabled operational ERP applications vendor assessment. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of the vendor's strengths and challenges.

#### SAP

After a thorough evaluation of SAP's strategies and capabilities, IDC has positioned the company in the Leader's category within this 2022 IDC MarketScape for worldwide SaaS and cloud-enabled operational ERP applications.

SAP deploys its intelligent ERP solution as SAP S/4HANA for on premises and SAP S/4HANA Cloud for cloud customers. SAP S/4HANA overall is focused on the operations, financial, order management, manufacturing, supply chain, and operational procurement. SAP S/4HANA Cloud is made up of production planning and scheduling, production operations, and quality management. SAP also provides additional capabilities for shop floor integration (Manufacturing Execution, MII) and via the SAP Digital Manufacturing Cloud.

Quick facts about SAP:

- **Employees**: 107,415
- Total number of cloud user base: Approximately 240 million users globally
- Globalization: Available in 64 localizations and in 39 languages
- Industry focus: Industry focus by SAP includes aerospace and defense; automotive; high tech; industrial machinery and components; forest products, furniture, and textiles; building materials; primary metals; fabricated metal products; mining; consumer products; fashion; retail; wholesale distribution; life sciences; healthcare; public sector; higher education and research; sports and entertainment; media; passenger travel and leisure; professional services; engineering, construction, and operations; telecommunications; cargo transportation and logistics service; chemicals; oil and gas; utilities; banking; and insurance

- Ideal customer size: Typically, customers with over \$200 million in revenue; however, there
  are also options for deployments with 50 users and up
- SaaS: SAP S/4HANA Cloud multitenancy on the infrastructure, database, and application layers
- **Pricing model**: License and subscription based
- Largest customer: Largest customers supporting 5,000+ users
- Partner ecosystem: Has a comprehensive partner network with over 22,700 partners globally (These include systems integrators and consultants, value-added resellers for the midmarket, ISV partners, and hyperscaler partners.)

#### Strengths

- Level of value delivered: SAP continues to deliver value for clients from innovation to best
  practices to additional insights. References told us that the best practice use cases and
  additional insights provided are bringing substantial value as they reset their businesses to
  new business processes and use the SAP S/4HANA system.
- Innovation: SAP continues to evolve its product with innovation. One reference said, "Our
  operations and finance areas have been enhanced with artificial intelligence and machine
  learning, helping us generate more in operational efficiency with greater automation of their
  processes."
- Pricing models and terms: References told IDC they find the flexibility of pricing, including units as a component of the pricing, one that is appealing, supportive, and customer friendly. In addition, organizations noted the opportunity to migrate is much more palatable with this aspect of pricing.

#### Challenges

- Complexity in doing business: Both the line of business and CIOs noted they wish there was
  less complexity as they work with SAP. Organizations find the company has multiple points of
  contact and sometimes it was confusing on whom to work with on road maps, enhancements
  to functionality, and ideas to further SAP's products.
- Customer support: Several references noted that when seeking help, the turn time was good but getting it right in a first-time touch was not there. When pushed one references said, "It is mainly because SAP uses one support system that can't move the questions around to the right areas the first time."
- Integration: References told IDC the integration takes a while to learn, but once you do and use the SAP Business Technology Platform (BTP), the integrations are much easier. References believe more education could remove many of the issues here.

#### **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**

This IDC MarketScape 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 MarketScape evaluates ERP technology with an operational slant. IDC's 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 the operation. 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

## **Related Research**

- *The Future of Enterprise Applications* (IDC #DR2022\_BC\_MNR, March 2022)
- The Future of Enterprise Software Markets: All About the Outcomes (IDC #DR2022\_GS5\_RP, March 2022)
- Artificial Intelligence Is Reshaping ERP and Finance Use Cases (IDC #US48897722, March 2022)
- The Right ERP System Enhances Business Value (IDC #US48333221, November 2021)
- IDC FutureScape: Worldwide Intelligent ERP 2022 Predictions (IDC #US47981721, October 2021)
- Market Analysis Perspective: Worldwide Enterprise Resource Planning Applications, 2021 (IDC #US47982721, September 2021)
- Enterprise Applications in the Digital-First World: Buying, Deployment, and Technology Trends (IDC #US47969921, June 2021)
- Asset-Oriented Manufacturing Value Chain 2021 Investment Guide (IDC #US47583821, April 2021)

## **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 manufacturers to consider when assessing/selecting a system.

"Operationally speaking, product-centric organizations need ERP systems they can rely from financial aspects to the right business processes and insights into their business. Operational ERP systems reviewed in this document are providing this value while enabling an agile enterprise that is answering the call to pivot on-demand in the digital-first world," stated Mickey North Rizza, program VP, Enterprise Applications and Digital Commerce. "The SaaS and cloud-enabled operational ERP market is a mix of vendors with many capabilities. It is critical that organizations select the right technology partner to help run the business in the digital world."

## **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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