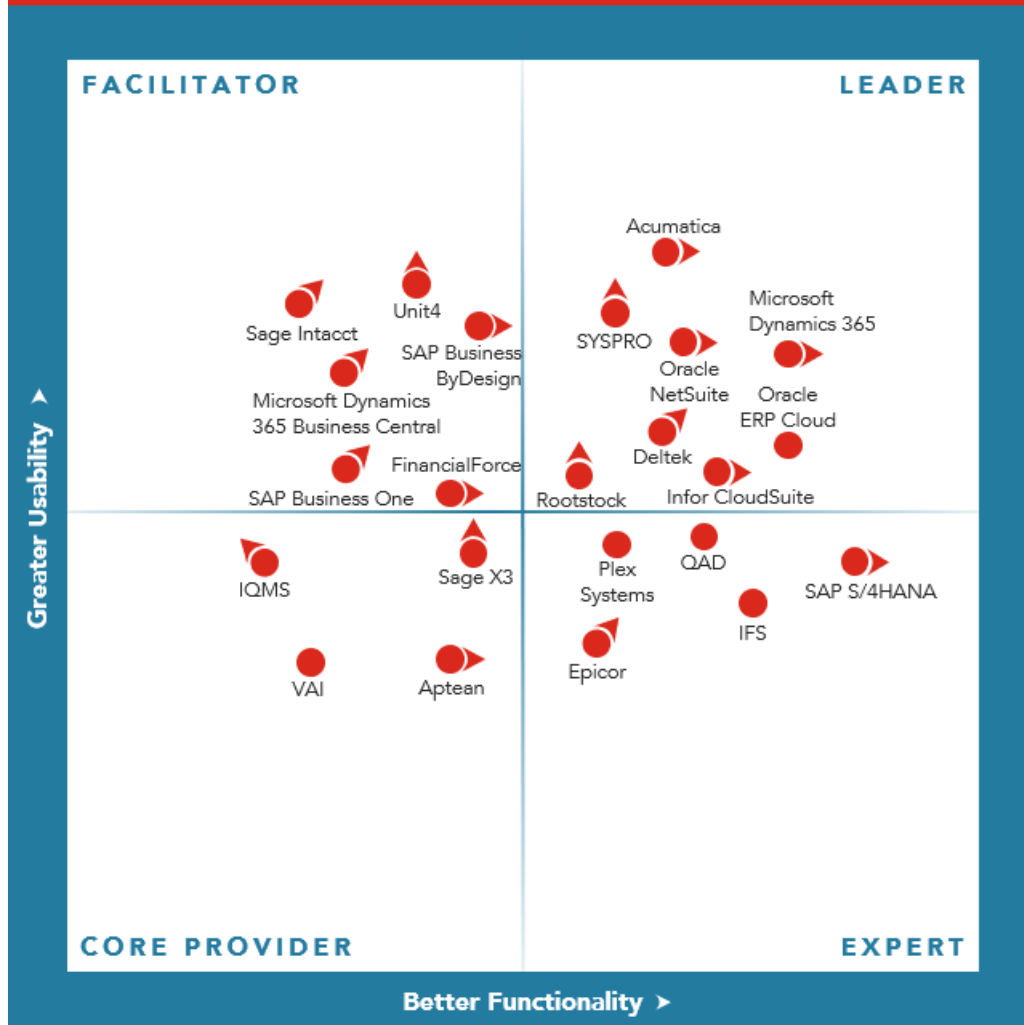**NUCLEUS RESEARCH**

ERP TECHNOLOGY VALUE MATRIX 2020

ANALYST
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THE BOTTOM LINE

Enterprise resource planning (ERP) software is the centerpiece to many enterprise application setups and remains a battleground for vendors looking to improve operational efficiency and enable growth through modern technologies. Transitions to cloud deployments now command even higher prioritization as remote work and collaboration capabilities have become essential for long-term success. To facilitate these migrations, many vendors have consolidated their service offerings to a select few industry verticals, allowing them to tailor capabilities such as artificial intelligence (AI) and the Internet of Things (IoT) to specific use cases. Results for these vendors and their customers are encouraging, as the focus yields increased implementation success rates and improved customer satisfaction.

ERP
Value Matrix | June 2020

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FACILITATOR

LEADER

Greater Usability ▲

Acumatica

Unit4

Sage Intacct

SAP Business ByDesign

Microsoft Dynamics 365 Business Central

SYSPRO

Microsoft Dynamics 365

Oracle NetSuite

Oracle ERP Cloud

FinancialForce

Deltek

SAP Business One

Rootstock

Infor CloudSuite

Sage X3

Plex Systems

QAD

IQMS

SAP S/4HANA

IFS

VAI

Aptean

Epicor

CORE PROVIDER

EXPERT

Better Functionality ▶

OVERVIEW

Enterprise resource planning (ERP) software is a vital component of enterprise software implementations, serving as both a central system of record and a connection between finance, planning, operations, customer relationship management (CRM), marketing, supply chain management (SCM), and human capital management (HCM). The race to the cloud has been reignited as fallout from the COVID-19 pandemic caused an abrupt and permanent spike in the demand for the ability to work remotely. Cloud-native solutions stand to gain the most from this paradigm shift, but vendors with large on-premises

deployment bases will have the chance to make good on their own transition roadmaps. Cloud migrations can require a gigantic amount of time, money, and effort to successfully manage, but it could mean the difference between life and death for a company during the next global disruption.

Usability for ERP solutions continues to depend upon greater flexibility, increased mobile access, and rapid user adoption. Cloud implementations promote the use of smartphones and tablets around the workspace, but the solution's user interface (UI) must be formatted to deliver information through condensed and easy to understand methods. Customers are still often in charge of driving user adoption, but Nucleus has observed that the most successful vendors work to ease the difficulties of change management through simplified workflows and UIs.

While some vendors take a broad approach to the ERP market, many have tactically consolidated their go-to-market strategies around the verticals in which they perform the best. The refined scope of market opportunities has enabled these specialized vendors to build deep out-of-the-box functionalities for industries with complex requirements and solve problems that would have otherwise required expensive customizations. (Nucleus Research – *Nucleus Top Ten Predictions for 2020* – October 2019). These focus adjustments have forced vendors to reevaluate what innovations to prioritize and how to deliver them to their customers. Capabilities such as the Internet of Things (IoT) and basic artificial intelligence (AI) enhancements are now table stakes for most industries and vendors must prove that their improvements are both relevant and usable enough to return significant value.

In this Technology Value Matrix, Nucleus assesses the ERP market based on the value customers realize from the product usability and functionality that vendors are delivering with their solutions (Nucleus Research S142 – Understanding the Value Matrix, September 2018). The Matrix is a snapshot of the market designed to help customers and prospects understand where vendors are differentiating in how they deliver value and where vendors are making significant product investments.

LEADERS

Leaders in the ERP Technology Value Matrix include Acumatica, Deltek, Infor CloudSuite, Microsoft Dynamics 365 for Finance & Operations, Oracle ERP Cloud, Oracle Netsuite, and SYSPRO.

ACUMATICA

Acumatica is a Leader in the 2020 ERP Technology Value Matrix, as it continues to expand its rapidly growing presence in the midmarket ERP space. The vendor is cloud-native and delivers its solutions, both general and industry-specific, via a SaaS business model. Acumatica's portfolio of supported industries includes commerce, construction, distribution, field service and manufacturing. Acumatica is unique among ERP vendors in that it only sells its solution through partners. As a result, there is no competition among vendor and partner sales teams for similar customers, allowing Acumatica to focus on product development and customer support.

Customers note that the solution's usability is a differentiator during initial evaluation and implementation, but the software can then scale to handle complex and high-volume data processing as well. New users can be onboarded quickly and collaborate efficiently across departments and geographies. Acumatica's flexibility enables users to configure their implementation to match existing best practice, while promoting the move away from siloed data and processes. The vendor has made significant investments in bringing Industry 4.0 functionalities to both its General Business and Industry Editions, demonstrating its commitment to providing long-term value for customers.

Since the 2019 Value Matrix, Acumatica has maintained a regular product update pattern, with major releases arriving twice per year. In September 2019, the vendor launched the 2019 R2 release for the Acumatica platform which brought usability enhancements for the mobile application, deeper granular control for all the industry editions, and a new integration with Google's G suite. The 2020 R1 release, announced in January 2020, introduced new ML-enhanced capabilities for expense management, simplified reporting for all editions, and the all-new Acumatica Payroll module. In June 2019, Acumatica was acquired by EQT Partners in a move that strategically linked it to another ERP vendor, IFS. There are no plans to merge either the companies or the products, but Acumatica and IFS will share market intelligence and best practices to better prepare for future ERP developments. Nucleus expects Acumatica to continue building upon its recent successes and improving its position in future editions of the Value Matrix.

DELTEK

Deltek is a Leader in the 2020 ERP Value Matrix as it remains the premier choice for project-centric ERP. The vendor provides a comprehensive suite of applications that enable customers to manage the whole project life cycle from opportunity to delivery and invoicing. Deltek provides specialized capabilities for verticals within government contracting including aerospace and defense, non-profits, and consulting; within professional services for accounting, legal firms, architecture and engineering, and marketing agencies; and for commercial project businesses within research and energy verticals. Deltek provides

solutions for SMBs but can scale up to handle large and complex datasets for enterprise-grade organizations through a range of deployment options from on-premises implementations to pure cloud deployments.

Since the previous Value Matrix, Deltek has continued its aggressive product expansion strategy to solidify its leading position as a project ERP provider. In August 2019, Deltek acquired ComputerEase, a construction accounting and field management software provider, to bolster its offerings for contractors working in architecture and engineering. In September 2019, Deltek established a strategic relationship with Deem, a corporate travel application vendor, to create an integrated travel and expenses platform within the Deltek ecosystem. In November 2019, Deltek launched various performance and usability updates for all of its solutions and introduced Acumen Touchstone, a cloud-native scheduling solution for project-based businesses. (Nucleus Research t166 – *Deltek accelerates product expansion at Insight 2019* – November 2019) Also in November 2019, Deltek announced a new partnership with Alirrium and UiPath to expand its robotic process automation offerings within its portfolio. Nucleus expects Deltek's product and partner development strategies to continue setting the pace for delivering value to project-centric businesses, which will help maintain its position in future editions of the Value Matrix.

INFOR CLOUDSUITE

Infor is a Leader in the 2020 ERP Technology Value Matrix. The vendor delivers its solutions through the CloudSuite platform and targets individual verticals with specialized functionalities and delivery options. Industries covered by Infor include automotive, aerospace and defense, distribution, industrial machinery, manufacturing, heavy equipment, fashion, food and beverage, healthcare, and public services. The solutions all natively integrate to the rest of Infor's enterprise application offerings, enabling customers to deploy best of breed solutions for supply chain management, CRM, asset management, human resources planning, and product lifecycle management. The solutions can be deployed through a range of options, including pure cloud and hybrid implementations, but the vendor has pledged to support on-premises deployments indefinitely.

Infor's product development strategy combines internally driven innovation with acquisitions that both expand the platform's coverage to new industries and enhances existing capabilities. Throughout the year, Infor released various usability and performance enhancements to each edition of CloudSuite. In July 2019, the vendor launched Infor Allocation and Replenishment to help multimarket retailers maintain one version of the truth across their operations. In August 2019, the vendor launched an updated version of Infor Concierge with a redesigned user experience, full mobile access to Infor help and training resources, and access to Infor Services project details. In September 2019, Infor announced the launch of its Coleman AI platform, allowing companies to deploy industry-specific

templates for developing AI-based projects. In January 2020, the vendor acquired Intelligent InSites, a healthcare software and services provider focused on using data from real-time location services. Finally, in April 2020, Koch Industries acquired Infor from its investment partner Golden Gate Capital, making the vendor a wholly owned subsidiary of Koch. CloudSuite's flexibility and scalability enable it to serve companies of all sizes and when combined with Infor's commitment to delivering specialized functionalities for complex verticals, will help the vendor maintain its position as a Leader in future editions of the Value Matrix.

MICROSOFT DYNAMICS 365

Microsoft is a Leader in this year's ERP Technology Value Matrix for its Dynamics 365 Supply Chain Management and Dynamics 365 Finance offerings. Regardless of industry, Microsoft provides capabilities to address financial performance, manufacturing processes and procedures, business logistics and supply chain management, and regulatory compliance. Built upon Microsoft's proprietary Azure cloud platform, Dynamics 365 received major upgrades this year to its supporting platform and Common Data Service. The Power Platform received enhancements to Power BI and extensions to both Power Apps low-code application development capabilities and Power Automate's robotic process automation tools. Users are now able to connect a wider range of solutions and disparate teams to the central data management system, improving overall solution flexibility, agility, and visibility.

With the world's attention centered on the economic impact brought on by COVID-19, supply chain resilience and collaboration capabilities have come to the fore of required solution functionality. In February, Microsoft announced its upcoming Dynamics 365 Project Operations solution. Designed for project-based services businesses, the tool consolidates the workflows of sales, project management, collaboration, and financial teams to drive greater visibility, collaboration, and data-driven insights. In April, Dynamics 365 Finance added credit management capabilities to maximize sales while limiting exposure through suggested credit control activities. From April to September, Dynamics 365 Supply Chain Management will see upgrades to its asset management, IoT, sourcing and procurement, warehouse management, and manufacturing functions. The Planning Optimization Add-in will help organization perform production planning in real time, accounting for customer demand, material availability, and capacity constraints across multiple sites and warehouses. As Microsoft extends the capabilities of its applications, while providing continuous support and upgrades to the underpinning platform, it will continue to lead the market through deep functional expertise balanced with ease-of-use.

ORACLE ERP CLOUD

Oracle ERP Cloud is a Leader once again in the ERP Technology Value Matrix. The modern successor to multiple legacy ERP solutions, Oracle ERP Cloud encompasses a broad range of verticals including financial and professional services, high tech, education, healthcare, retail, communications, manufacturing, and consumer goods. Oracle ERP Cloud's comprehensive functionality coverage enables companies of all sizes and complexities to manage their operations from end-to-end with core and international financial management, reporting and analytics, project management, risk management and many specialized capabilities for verticals with complex service requirements. Native integrations to other Oracle enterprise applications give companies access to leading solutions for enterprise performance management, CRM, human capital management, and supply chain management. Oracle has made significant progress in matching the functionality depth of the ERP Cloud to the sophistication that many longstanding customers have achieved through their on-premises deployments.

Customers report that Oracle ERP Cloud's business process management capabilities make it an ideal choice for enterprises moving into their final stage of corporate growth and the connections to other Oracle solutions present a significant opportunity for interdepartmental value (Nucleus Research t113 – Connecting Finance and Human Resources in Oracle Cloud – August 2019). The vendor has maintained its aggressive pursuit of introducing Industry 4.0 capabilities, with AI-enhanced analytics, digital assistants, and IoT-driven functionalities all adding to Oracle ERP Cloud's fundamental value proposition. Oracle continues to win deals for around the world and across all of the industries that it serves, which speaks as a testament to the success that both existing and net new customers experience with the software. As customers continue to move part or all of their data and workflows to the cloud, Nucleus expects Oracle to continue driving long-term value as a centerpiece to successful enterprise application deployments.

ORACLE NETSUITE

Oracle NetSuite is once again a Leader in the ERP Value Matrix. NetSuite is a cloud-native ERP suite that targets small and medium-sized businesses with aggressive growth strategies across a wide range of industries and geographies. The vendor operates as a global business unit of Oracle which has helped it solidify a significant presence around the world, including support for more than 190 currencies and 27 languages in more than 200 countries and territories. NetSuite's coverage of complex functionalities such as simultaneous compliance with multiple tax codes, master data management, and multi-currency expense capture has helped accelerate its global adoption.

NetSuite has made significant process in developing the SuiteSuccess program to help customers with complex industry-specific needs. Nucleus has observed that partners who develop specialized ERP offerings experience with NetSuite can accelerate implementation

timelines and reduce building errors which accelerate payback periods and increase customers' return on investment (Nucleus Research t145 – *Guidebook: Vertical Specialization with NetSuite Partners* – October 2019). NetSuite and its partners have developed unique ERP knowledge for a large number of verticals including advertising, media and publishing, software, services, nonprofit, manufacturing, wholesale distribution, and retail.

Since the last Value Matrix, NetSuite has maintained its own aggressive growth strategy, beginning with NetSuite 2019 Release 2, which was made available in October 2019. Highlights included enhancements to the solution's data integrations, offline support for expense management in the mobile application, a new user interface for SuiteAnalytics, and additions to each of its vertical industry applications. Additional product updates included further extensions for general ERP functionalities and coverage expanded to Mexico, Ireland, and the United Kingdom. Finally, in March 2020, the vendor launched NetSuite 2020 Release 1, delivering both new automation capabilities and streamlined workflows across all operational elements of the solution. Based on its functionality depth and breadth and global reach, Nucleus expects NetSuite to continue expanding its customer base as more midmarket companies look to the cloud to support their future operations.

ROOTSTOCK

Rootstock is a Leader in the 2020 ERP Value Matrix. The vendor provides modules for ERP functionalities including core financials, sales order processing, production, inventory, supply chain, distribution, and engineering through the Salesforce Lightning platform. Rootstock has historically performed well among companies already familiar with Salesforce technology, but the company is experiencing increased success in transitioning new customers away from on-premises ERP deployments. Rootstock covers a wide range of verticals that center around manufacturing and distribution including electronics, engineer-to-order, high tech, industrial equipment, machinery, project manufacturing, and wholesale distribution.

Customers report that the Lightning platform is a differentiator as its ease-of-use enables new users to quickly become experts. The solution's low barriers for implementation allows companies to configure dashboards and analytic blends to quickly meet their needs and provide new levels of organizational visibility. Rootstock can scale to accommodate major growth from its customers and provides the flexibility necessary to implement Industry 4.0 capabilities such as IoT-informed analytics and artificial intelligence enhancements.

In the last year, Rootstock has made significant strides in expanding its ability to deliver value to its customers through the unique opportunities provided by the Salesforce platform. In November 2019, the vendor launched a new ERP connector to the Salesforce Field Service Lightning solution to provide customers using both solutions with greater

operational visibility and more efficient workflows. Also in November 2019, Rootstock launched new integrations between its 360° Sales and Operations Planning engine and the Salesforce Manufacturing Cloud, helping manufacturers generate production and supply chain plans. Finally, in May 2020, the vendor released its Spring 2020 update, introducing Freight and Landed Cost and Inventory License Plating functionalities to the solution. Rootstock's combination of specialized expertise for manufacturing and distribution ERP and delivery through the Salesforce ecosystem will help maintain and improve its position on future editions of the Value Matrix.

SYSPRO

SYSPRO is a Leader in the 2020 ERP Value Matrix. The vendors focuses on providing specialized manufacturing and distribution functionalities for verticals including automotive, food and beverage, industrial machinery, packaging, plastics and rubber, electronics, and fabricated metals. SYSPRO also covers general ERP capabilities including accounting and financial management, reporting and analytics, inventory optimization, workflow management, and can scale up to accommodate the workloads of both SMBs and tier-one enterprises. Customers can deploy SYSPRO through a range of options, either on-premises, hybrid, or in the cloud, and can leverage Microsoft Azure's advanced cloud capabilities through a strategic partnership between the two companies.

SYSPRO's focus on providing specialized ERP functionalities for a set number of manufacturing and distribution verticals enables the vendor to provide "last mile functionality" out of the box (Nucleus Research t102 – *SYSPRO consolidates vertical focus at Catapult 2019* – July 2019). This "ERP realism" allows the company to natively develop industry-specific capabilities from the ground up, thereby avoiding expensive software customizations and driving long term value for customers with complex requirements. This strategy has led to consistent wins over more recognizable ERP vendors as customers feel better equipped to incorporate Industry 4.0 technology, such as AI, IoT, and bots, to their existing operations and best practices.

In April 2020, the vendor launched updates to SYSPRO 8, with enhancements to the solution's usability and product management functionalities. Product Recall was expanded to increase traceability on individual items, while tax and Point of Sale both received additional automation capabilities to support the global digitization of financial activities. Nucleus expects that SYSPRO's commitment to providing comprehensive coverage to its core market of manufacturing and distribution verticals will help it keep pace with product development trends and maintain its position as a Leader in the Value Matrix.

EXPERTS

Experts in the ERP Technology Value Matrix 2019 include Epicor, IFS, Plex, QAD, and SAP S/4HANA.

EPICOR

Epicor is an Expert in the 2020 Value Matrix. The vendor provides broad coverage for ERP functionalities including financial and supply chain management, planning and scheduling, eCommerce and Point of Sale, production and service management, payment processing, and business intelligence and analytics. Epicor has begun to experience success with transitioning its existing customer base to Microsoft Azure-supported cloud implementations in specialized verticals such as manufacturing, retail, distribution, and building materials. The company has made significant investments into its user experience Epicor Kinetic and to introducing industry 4.0 capabilities like IoT and AI to its cloud deployments.

Epicor's aggressive expansion and development tactics have yielded many results since the 2019 Value Matrix. In June 2019, Epicor acquired MechanicNet Group Inc., a CRM and retention solution for motor vehicle service businesses, followed by the acquisition of warehouse management solution provider Majure Data in July 2019. In October 2019, the vendor launched major updates to both its ERP and DocStar enterprise content management solutions. Highlights included expanded features for Epicor Collaborate and Epicor Functions, new skills for the Epicor Virtual Agent (EVA) and automated tasks in DocStar ECM Forms 2.0. In November 2019, Epicor launched LumberTrack 2020 with new features including AP Automation, connectors for Voyage Management, and an updated user experience. Finally, in April 2020, Epicor released the Epicor Commerce Connect Express (ECC Express) portal to help customers rapidly improve productivity and eCommerce experience management.

Epicor's focus on delivering specialized value to industries with complex ERP requirements will appeal to customers looking to move away from generalist software. Sustaining momentum for both functionality development and cloud transitions over the next year will be crucial to remaining competitive with the rest of the market. Nucleus expects Epicor to preserve its position on the Value Matrix as it expands its service offering to accommodate a larger customer base.

IFS

IFS is an Expert in the 2020 ERP Technology Value Matrix. The vendor provides a platform for IFS Applications 10 which cover functionalities for core financials and accounting, CRM,

HCM, project management, asset management, planning, logistics and fulfillment, and field service management. The vendor works with over 400 partners to serve more than 10,000 customers around the world. IFS focuses on serving asset-intensive industries including high tech, automotive, energy, oil and gas, aviation and defense, industrial and process manufacturing, and services. IFS offers a range of deployment options for its applications, with on-premises, hybrid, and cloud options all available.

IFS is dedicated to introducing modern ERP functionalities for its customers including its smart assistant, the IFS Aurena Bot, and digital twins to allow for deeper maintenance and capacity planning. The solution also employs a containerized architecture, allowing companies to scale the solution according to actual usage and roll out updates with no downtime.

IFS entered a strategic relationship with Acumatica when its owner, EQT Partners, acquired the cloud-native vendor in June 2019. The vendors do not expect any further product or corporate merges, but there are plans to share best practices and coordinate on global expansion strategies. With greater access to cloud ERP expertise and aggressive product development in the roadmap, Nucleus expects IFS to continue delivering specialized value to customers within its specialized verticals.

PLEX SYSTEMS

Plex Systems is an Expert in the 2020 ERP Value Matrix. The vendor provides the Plex Smart Manufacturing Platform and supports a wide range of functionalities including core financials and accounting, project management, procurement, task automation, planning, scheduling, and quality management. The solution has native integrations with Plex's Manufacturing Execution System, Supply Chain Planning, and Industrial Internet of Things solutions but also provides API connectors to third party applications for CRM, HCM, and third-party ERP solutions to support two-tier scenarios. Plex focuses on delivering value to specialized industries within manufacturing including automotive, aerospace, food and beverage, electronics, industrial manufacturing, plastics and rubber, and metal forming.

Since the 2019 Value Matrix, Plex has continued to develop specialized manufacturing functionalities for the verticals it serves to differentiate it from a crowded ERP market. In May 2019, the vendor launched Plex Industrial IoT, a suite of solutions that target business challenges originating from shop floors. The solutions help customers manage data streams by connecting machines to cloud networks and providing real time context to the generated information. In November 2019, Plex released its Manufacturing Execution Suite (MES), which was previously only available as part of its broader ERP suite, as a dedicated offering to help customers address control and visibility shortcomings that are inherent to legacy on-premises ERP solutions. In May 2020, the vendor both announced a new strategic partnership with the robotic process automation (RPA) technology provider Thirdware and

launched the Plex Market Forecast Manager, the newest part of the Plex Supply Chain Planning Suite. Nucleus believes Plex's targeted development of manufacturing functionalities in complex verticals will drive additional value for both existing customers and those looking to transition to the cloud for the rest of 2020 and beyond.

QAD

QAD is an Expert in the 2020 edition of the ERP Value Matrix. The vendor delivers manufacturing ERP functionalities through its flagship solution, QAD Adaptive ERP, with a specialized focus on six industries: automotive, food and beverage, consumer products, industrial, high tech, and life sciences. General capabilities provided by QAD Adaptive ERP include core financials, supply chain management, customer and service management, scheduling, capacity planning, and manufacturing operations. Customers can choose from a range of deployment options from on-premises to completely in the cloud, but QAD has made significant investments to making its cloud offerings as attractive as possible. Many Industry 4.0 capabilities are already available to QAD cloud implementations, including embedded analytics using a data lake, blockchain applications, and an IoT-based production execution solution to provide greater production visibility. QAD is working on projects including robotic process automation and digital twins in the QAD Labs.

QAD maintained a high level of activity throughout the year as it continued to build out product capabilities and expand its international presence. In July 2019, the vendor a global trade and transportation benchmarking tool to help customers measure their own costs against industry best practices, while in August 2019, the vendor's global multi carrier network was expanded. QAD announced enhancements to QAD Adaptive ERP in both October 2019 and April 2020, with user experience updates coming to QAD Enterprise Asset Management, QAD Manufacturing, QAD Fixed Assets, and "Action Centers" in the October release. The April release featured expanded no- and low-code capabilities from the QAD Enterprise Platform, greater usability for the Customer and Service Management applications, and streamlined workflows for both QAD Financials and QAD Supply Chain. QAD's commitment to providing specialized functionalities for its core markets will enable it to drive additional value for those customers and will contribute to its position on future editions of the Value Matrix.

SAP S/4HANA

SAP S/4HANA is an Expert in the 2020 ERP Value Matrix. The solution is SAP's multi-component suite for the largest enterprises that require deep processes with complex

variations and covers a wide range of functionalities including finance, manufacturing, professional services, procurement, supply chain, commerce, asset management, sales, and human resources. SAP has implemented a cloud transition roadmap to help customers move away from legacy deployments and provides quarterly updates to SAP S/4HANA Cloud with annual updates for SAP S/4HANA. The vendor runs the gamut for industry coverage with implementation partners and value-add resellers providing solution extensions wherever they are needed.

SAP has continued the aggressive pace of its functional development, culminating with the release of SAP S/4HANA Cloud 2005 in May 2020. Updates included tighter integrations between project management and sales processing, improved security surrounding bank and customer transactions, and improved profitability analysis with expanded KPI tracking and drill-down capabilities for data analysis. Enhancements were also delivered to inventory optimization and tracking as well as SAP S/4HANA Cloud's predictive material and resource planning solutions, allowing users to conduct more extensive scenario analyses for mid- and long-term planning.

SAP S/4HANA's wide coverage of both customer verticals and Industry 4.0 capabilities is evidence of the solution's premier flexibility, but it can lead companies to attempt overly ambitious digital transformation projects. Prospective customers must align the size and scope of their SAP S/4HANA implementation with the needs and goals of their organization to give themselves the best chance of long-term success. Nucleus expects that SAP S/4HANA's holistic value proposition and continued cutting-edge product development will improve its position on future editions of the Value Matrix.

FACILITATORS

Facilitators in the 2019 edition of the ERP Technology Value Matrix include FinancialForce, Microsoft Dynamics 365 Business Central, SAP Business ByDesign, SAP Business One, and Unit4.

FINANCIALFORCE

FinancialForce is a Facilitator in the 2020 ERP Value Matrix. The solution is built on the Salesforce Lightning platform and provides customer-centric ERP for financial management, professional service automation (PSA), and people management. FinancialForce's native integrations with Salesforce enable customers to incorporate Einstein analytics and other applications from the Salesforce AppExchange into their regular operations. FinancialForce often delivers value as part of a larger Salesforce application deployment, but the solution's

deep functionality for core financials and PSA has led it to considerable success as a standalone implementation.

In July 2019, FinancialForce and Zimit CPQ entered into a strategic partnership to deliver service-based configure, price, quote capabilities through the FinancialForce platform. In September 2019, the vendor launched the FinancialForce Reseller Program to help expand its global market footprint. The vendor launched updates for its Fall 2019 release and previews for its Winter 20202 release in January 2020 with new predictive analytics capabilities, project management and forecasting enhancements, and functionalities for subscription-based industries. The Spring 2020 Release, launched in April 2020, features deeper personalization capabilities, faster and more accurate reporting for financials and project management, and additional automation enhancements. FinancialForce's roots in the Salesforce Lightning platform make it an attractive choice for companies that need to quickly move onto an easy-to-use solution with strong financial management and PSA functionalities. Nucleus expects FinancialForce will maintain its position on future editions of the Value Matrix as it continues to invest in functionality development.

MICROSOFT DYNAMICS 365 BUSINESS CENTRAL

Microsoft is a Facilitator in the 2020 ERP Technology Value Matrix for its Dynamics 365 Business Central solution. A cloud-native solution built on the NAV platform, Business Central is Microsoft's SMB management offering in the cloud, which is also capable of hosting on-premises deployments. Since the previous Value Matrix, Microsoft has deepened its investments to transition its on-premises Dynamics GP, Dynamics SL, and Dynamics NAV customers to Business Central cloud, providing additional and improved migration tools with the April product update release. The central platform consolidates its user's enterprise data and business functions under a single UI to streamline sales, inventory management, warehouse management, customer service, project management, manufacturing, regulatory compliance, and finance operations.

Microsoft Dynamics 365 Business Central sold exclusively through Microsoft's Cloud Solution Provider Program (CSP), where VAR partners can offer customized solutions to address their customers/ unique business needs. Users can also purchase solutions and extensions released by ISVs on AppSource to equip their software ecosystem with end-to-end industry-specific capabilities. Announced in April, Microsoft plans to release upgrades that address the increased global demand for Dynamics 365, including security, geographic expansion, extensibility, and customer migration updates. Various performance upgrades are also slated through to October 2020, including streamlined data entry and UI updates to boost overall productivity. With the steady growth of net new Business Central customers and upcoming product updates to extend its solution reach, Nucleus expects Microsoft to accelerate the migration and growth of its cloud base through 2020.

SAGE INTACCT

Sage Intacct is a Facilitator in the 2020 ERP Value Matrix. Founded in 1999, with headquarters in San Jose, California, the vendor focuses on delivering rapid value to midmarket customers across a wide range of verticals including accounting and financial services, construction and real estate, healthcare, nonprofits, professional services, software, and wholesale distribution. Sage Intacct supports a large number of general ERP functionalities including core financials, dashboards and reporting, budgeting, and spend management in addition to more advanced capabilities such as project accounting and multi-entity and global consolidations.

Sage Intacct customers value the solution's low barriers to implementation which enable them to quickly go live and accelerate the payback period of their investment in the software. Sage Intacct's out-of-the-box functionalities have the flexibility and scalability to support all sorts of business plans, which helps the vendor partner with its customers to achieve long-term success. The Sage Intacct platform also boasts a wide range of integrations with third party enterprise applications including Salesforce for CRM and configure, price, quote (CPQ) functionalities.

Sage Intacct has invested heavily in expanding to new markets, arriving in Australia in August 2019, the United Kingdom in November 2019, and Canada in February 2020. Sage Intacct has also demonstrated its commitment to realizing Industry 4.0 capabilities, adding AI-driven enhancements to its general ledger, reporting, and scheduling applications. In March 2020, the vendor launched a new solution, Sage Intacct Construction, to address the unique cloud software needs of construction companies. Sage Intacct's development of easy-to-use out-of-the-box functionalities and sustained success with transitioning customers to the cloud will help improve its position on future editions of the Value Matrix.

SAP BUSINESS BYDESIGN

SAP Business ByDesign is a Facilitator in the 2020 ERP Value Matrix. The solution is a cloud-native ERP software that targets larger midmarket customers who are often in their second or third phase of corporate development. As such the solution can scale up to handle large volumes of data with enough flexibility to manage any sort of legal or geographic complications. SAP Business ByDesign is used in more than 140 countries around the world and supports a wide range of sophisticated ERP functionalities including robust core financial management, CRM, supply chain management, supplier relationship management, sales, project management, and human resources. The solution serves numerous industries including wholesale distribution, manufacturing, and professional services, and has a partner network with more than 250 members that can extend the solution into additional verticals.

Recent updates to SAP Business ByDesign run the gamut from minor operational improvements to entirely new functional capabilities. Mobile lead creation can be triggered simply by scanning a business card, while order-to-cash and procure-to-pay workflows have been introduced with strong focus on supply chain management. Additional localizations have been finalized including Brexit preparation and compliance modules. Future plans for expanding the solution's supply chain management and people engagement capabilities will extend SAP Business ByDesign's value proposition both for current customers and companies who require comprehensive cloud-native ERP software. Nucleus expects that further developments in out-of-the-box functionalities and ease-of-use enhancements will improve SAP Business ByDesign's position on future editions of the Value Matrix.

SAP BUSINESS ONE

SAP Business One is a Facilitator in the 2020 ERP Value Matrix. The solution is an end-to-end platform tailored for small businesses and supports functionalities for core financials, production management, warehouse management, procurement, inventory management, CRM, project management, reporting and dashboards, and analytics. SAP Business One serves almost 70,000 customers around the world across verticals including healthcare, financial services, manufacturing, higher education, agriculture, and professional services, with 50 country localizations and 28 languages. As an international service provider, SAP Business One covers many cross-border functionalities including tax compliance and automatic multi-currency translation for expenses and revenue.

SAP Business One's most recent version (10.0) delivered various updates across all pillars of operation including enhancements to the web client for advanced analytics and reporting, while more localizations and legal compliance capabilities were added. New functionalities to connect sales reporting with more departments and to improve the granularity of CRM were also launched. The solution now boasts new levels of extensibility with deeper integrations to SAP HANA database servers and Microsoft Office 365 in addition to user interface updates. Nucleus expects that further functionality expansions will continue to improve SAP Business One's future position on the Value Matrix.

UNIT4

Unit4 is a Facilitator in the 2020 ERP Value Matrix, providing a "people-centric" ERP solution that specializes in functionalities for higher education, nonprofits, professional services, and public services. The solution, Unit4 Business World, delivers many ERP functionalities including financial management, project management, procurement, human resources and payroll, field service, and asset management. Unit4 provides a range of deployment options, (from on-premises, to hybrid, to fully in the cloud) but has invested heavily in evangelizing the future value and growth opportunities made possible by new cloud

implementations. Unit4's focus on four key verticals is another successful demonstration of what Nucleus refers to as "ERP realism" and enables the vendor to support complex industry-specific ERP needs out of the box (Nucleus Research t168 – *The business value of ERP realism* – November 2019). The resulting relationship proves valuable to customers in the long run as the vendor grows and adapts with both the individual company and the industry as a whole.

Unit4 is committed to delivering Industry 4.0 capabilities to its customers in a user-friendly capacity, with features such as the People Platform Extensions Kit that enable customers to build low-code and no-code applications on top of their existing deployments. Enhancements to Unit4's digital assistant Wanda have been regularly released since the previous Value Matrix, with broader support for task automation and improved natural language processing for planning and analysis. In October 2019, the vendor announced a new strategic focus on People Experience while in March 2020, Unit4 announced the launch of a strategic partnership with Arribatec, a global solutions business provider, to increase its market footprint. Nucleus expects Unit4 to maintain pace with the market's overall functionality development and differentiate itself in its supported verticals with specialized expertise.

CORE PROVIDERS

Core Providers in the 2019 edition of the ERP Technology Value Matrix are Aptean, IQMS, Sage, and VAI.

APTEAN

Aptean is a Core Provider in the 2020 Value Matrix, with a solution that provides general and specialized functionalities including core financials, reporting and analytics, distribution, logistics, inventory management, and capacity planning. The vendor covers a wide range of verticals with individual solutions for discrete and process manufacturing, food and beverage, process management, retail, automotive, electronics, and wholesale distribution. Aptean also provides functionalities for SCM, enterprise asset management, compliance management, manufacturing execution systems, and warehouse management systems. Customers can choose from a range of deployment options, although most product developments are introduced to cloud implementations first.

Aptean has sustained its high activity levels since the previous Value Matrix, combining both internal product development with external company acquisitions. In September 2019, Aptean announced the launch of Aptean Respond 8.0 and completed its acquisition of

Sanderson Group Plc, a UK-based provider of technology solutions and services. The product update introduced improved survey customizing functionalities and real-time analysis to customers while the acquisition presents an opportunity for the vendor to grow its European presence. Aptean then completed three acquisitions across October and November of 2019, of Beck Consulting, Linkfresh in the UK, and Schouw Informatisering in the Netherlands. The three companies all specialize in food and beverage ERP capabilities and will help Aptean deepen its own capabilities while further increasing its exposure to European markets. In March 2020, Aptean completed the acquisition of UK-based Paragon Software Systems to bolster its transportation management capabilities. Nucleus expects that the commitment to developing specialized ERP for its core markets will return significant value for both Aptean and its customers as overall product evolution accelerates.

IQMS

IQMS is a Core Provider in the 2020 ERP Technology Value Matrix. The vendor provides ERP, warehouse management systems (WMS), and manufacturing execution systems (MES) to industries including aerospace and defense, automotive, medical, plastics, and packaging. IQMS focuses on centralizing separate company information sources onto a single platform and database, and offers a range of deployment options, including on promises, hybrid cloud, and pure SaaS. IQMS enables customers to modernize their operations with Industry 4.0 functionalities including robotic process automation, maintenance, repair, and operations (MRO) tracking, and IoT-driven overall equipment effectiveness (OEE) management. IQMS also boasts native integrations with various major software providers, including Oracle, Microsoft, Salesforce, and Marketo.

Building on its December 2018 acquisition by Dassault Systèmes, IQMS has been integrated into the 3DEXPERIENCE platform to expand the solution's ERM and MES capabilities. The solution is well suited for companies looking to make the switch from Microsoft Excel or Quickbooks to a dedicated ERP solution that can handle large and complex data workloads and incorporate new technology into daily operations. Nucleus expects that the IQMS's continued product development and role as a component to a comprehensive suite of enterprise applications will help the vendor maintain its position on future editions of the Value Matrix.

SAGE X3

Sage X3 is a Core Provider in the 2020 ERP Value Matrix. The vendor provides ERP functionalities for product-centric businesses, with specialized coverages for verticals including construction, discrete manufacturing, process manufacturing, wholesale distribution, and transportation. Sage X3 can be configured to meet the exact requirements of its customers and can scale to handle large and complex data volumes with native

support for multiple countries, currencies, languages, and locations. The solution also has the flexibility to support extensions for industries including agriculture, food and beverage, chemicals, and eCommerce. Sage has created a comprehensive application marketplace together with its partners with the goal of being a holistic suite of enterprise solutions for financial management, CRM, HCM, and operations management.

Sage has continued to add to its investments in construction functionalities, with the launch of Sage ToolOps announced in December 2019. Created with ToolWatch, a provider of equipment, tools, and materials management software, Sage ToolOps will help customers track the cost and performance of their resources from a single dashboard. In February 2020, the vendor launched a new Marketplace platform to extend the reach of its independent software vendors (ISVs). The Sage Marketplace will showcase independent apps that have been tested and verified by Sage, allowing customers to compare solutions and make the right choice for their business. Sage's specialized experience in construction and distribution verticals, along with its investments in transitioning its existing customer base to the cloud, will both help the vendor improve its position on future editions of the Value Matrix.

VAI

VAI (Vormittag Associates, Inc.) is a Core Provider in the 2020 ERP Technology Value Matrix. VAI's flagship solution, S2K Enterprise, covers a broad range of ERP functionalities, including core financials, distribution and warehouse management, CRM, business intelligence, marketing, and ecommerce. VAI also provides Food and Pharmaceutical editions of S2K Enterprise in addition to specialized manufacturing capabilities such as work orders, material planning, capacity planning, shop floor control and product quality management. VAI can scale up to handle large and complex datasets is positioned to serve midmarket customers with aggressive growth plans in verticals such as apparel, electronics, building and electrical supply, and medical products.

In June 2019, VAI partnered with Infocon Systems to deliver a cloud-based electronic data interchange (EDI) platform, allowing customers to streamline their transaction processing capabilities. In August 2019, the vendor launched S2K 6.1 that featured various enhancements for automated processes, enhancements to analytics and mobile applications, and increased granularity on operational and financial data through new drill-down features. In November 2019, VAI released S2K Eyewear, a dedicated solution for eyewear manufacturers and distributors, designed to consolidate planning, reporting, and tracking for sales and operations onto a single platform, either on premises or in the cloud. Nucleus expects VAI to continue expanding its coverage of verticals with complex requirements which will help maintain its position on future editions of the Value Matrix.