



ERP TECHNOLOGY VALUE MATRIX 2017

ANALYST

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THE BOTTOM LINE

The Enterprise Resource Planning (ERP) market continues to shift as cloud technology matures and vendors strive to deliver more industry-specific capabilities in their core products.

Although some customers still do not see sufficient value in the cloud, many vendors are seeing adoption accelerate, with more companies moving critical business processes in the cloud rather than just edge applications. To improve their value proposition leading vendors are making their cloud offerings more extensible, giving customers the flexibility to which they are accustomed from their on-premise legacy systems.

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MARKET OVERVIEW

Enterprise Resource Planning (ERP) is a critical part of how a company collects and manages information about many distinct parts of the enterprise, including finance, marketing, sales, planning, purchasing, inventory, and human capital. Frequently functioning as a central system of record, ERP software integrates data from disparate silos, ensuring users have the information they need to do their jobs at their fingertips. Vendors of modern ERP systems are delivering solutions that help organizations transform their operations from manual, labor-intensive processes to digital and automated tasks.

In this Value Matrix, Nucleus evaluates ERP market vendors based on their product usability and functionality and the value that customers realize from the capabilities of the product (Nucleus Research, *R59 – Understanding the Value Matrix*, April 2017). As a snapshot of the ERP landscape, the goal of this research is to help inform the

market about how well vendors are delivering value to their customers and what customers and prospects can expect moving forward based on the investments vendors are making today.



The predominant theme of the 2017 ERP Technology Value Matrix is verticalization. As vendors continue their push to the cloud, delivering more capabilities that are tailored to specific industry needs has become the drive of many R&D dollars. Many of the vendors featured in this year’s Value Matrix with a considerable number of customers on legacy systems have struggled to get their cloud business arms off the ground. They are focused on delivering the functional depth in the cloud that their customers are accustomed to in their highly customizable on-premises

environments while ensuring their cloud solutions can deliver a positive return on investment (ROI) to as many of their customers as possible. Meanwhile, cloud-native vendors are looking to diversify from the one-size-fits-all model, delivering more industry-specific capabilities out of the box.

Giving customers choice remains paramount, owing to the fact that a single jump to the cloud for many enterprises is unrealistic. For many vendors moving customers off legacy systems, flexible and hybrid deployment options are table stakes at this point. Vendors are responding to the concerns of some customers, particularly those in manufacturing sectors, of potential downtime and lost production if connectivity fails.

With some vendors able to claim customers who have been on cloud deployments for nearly a decade, the value proposition for cloud ERP has had sufficient time to develop. (Nucleus Research, *Q102 – Cloud ERP gets 43 percent faster payback*, June 2016). Vendors are innovating to extend the value they deliver and ensure that their customers have the latest business technologies such as Big Data, Internet of Things (IoT), machine learning, Artificial Intelligence (AI), and advanced analytics. While many vendors are in the initial stages of operationalizing these technologies, the early returns from customers demonstrate that at least some use cases live up to the marketing hype.

LEADERS

Leaders in the 2017 ERP Technology Value Matrix include: Acumatica, Deltek, FinancialForce, Infor, Microsoft, Oracle, Rootstock, SAP, and SYSPRO.

ACUMATICA

Acumatica continues as a Leader in the 2017 edition of the ERP Value Matrix, with a heavy focus on usability and platform flexibility. Excelling in several industries including manufacturing, wholesale distribution, retail, food and beverage, non-profits, and services, part of Acumatica's strength comes from the ability of its platform to address the needs of almost any customer (Nucleus Research, *R11 – Acumatica Cloud xRP Platform delivers value*, January 2017). From a functional perspective, Acumatica has been working on some manufacturing micro-verticals such as cardboard and beauty supplies. The vendor is also focusing on improvements to its project module, such as delivering project accounting in the project management system. Lastly, Acumatica has also been investing in multi-company capabilities to help customers navigate a variety of accounting procedures.

As one of the fastest-growing cloud ERP companies, Acumatica is taking steps to ensure that its partner ecosystem maintains the quality level customers have come to expect, especially as some larger partners come on board. The vendor has also put energy into its customer relationship management (CRM) solution such as integrating with HubSpot and Salesforce. Field service management has also been an area of growth, delivering capabilities like delivery routing and virtual and mobile warehouse. With a new user interface (UI) set to be released this autumn, Acumatica seeks to make its product more user-friendly with pre-built dashboards, yet with the flexibility to be tailored for each user. Customers that already take advantage of the platform flexibility should be able to continue to improve their workflows with the new UI, realizing additional value in the process.

DELTEK

Deltek continues as a Leader in the 2017 edition of the ERP Value Matrix, delivering value to project-centric businesses, including government contractors, architecture, engineering, and construction (AEC), law firms, marketing agencies, aerospace and defense, management and IT consulting, healthcare, and non-profit. With its solutions delivered via private or public cloud or on-premises, Deltek goes to market looking to support its customers at every step of the project lifecycle from proposal to completion.

Deltek has been investing in easing the transition to cloud and extending the value of its solutions. Deltek developed cloud conversion programs that help customers move to the cloud from on-premises legacy deployments. Deltek's cloud operations team is a value driver for customers, ensuring that the product runs smoothly and any issues are quickly resolved. In June, Deltek announced the launch of Deltek Partner Marketplace which expands on the investments it has made to its Product Partner program. The Product Partner program helped connect customers with third-parties that offered extensions to Deltek, which help customers realize additional value from their deployments. Now through the Partner Marketplace, partners can market their products directly to customers and prospects.

In the last edition of the Value Matrix, Nucleus suggested that the fruition of investments in user experience (UX) and a consolidated cloud offering would be the next steps for Deltek to further its value proposition. With over 7,000 customers in the cloud, Deltek is aggressively moving toward that goal, unifying industry-vertical best practices in its cloud solutions.

FINANCIALFORCE

FinancialForce is a Leader in the 2017 ERP Technology Value Matrix with its focus on professional services automation (PSA) and core financials. In many instances, the

vendor differentiates with its native integration on the Salesforce platform, helping companies streamline their workflows from opportunity to billing delivered in the cloud. FinancialForce made the strategic decision to cease development on some of its human capital management capabilities opting instead to partner with ADP to support its customers' needs starting with payroll with plans to expand the partnership in the future. The move indicates that FinancialForce is refocusing on its core, striving to be the best cloud-based PSA and financials vendor on the market.

FinancialForce seeks to fulfill three requirements of modern ERP that its customers demand: business model agility, time and talent optimization, and predictive insights. For companies that are shifting to a more service-oriented business away from solely traditional product sales, FinancialForce helps them tie together revenue streams with different recognition requirements. Additionally, the mobile functionality and project visibility delivered by FinancialForce help organizations efficiently allocate remote employees juggling multiple projects. Lastly, FinancialForce being natively integrated with the Salesforce platform helps customers leverage the latest capabilities delivered on the platform, such as business intelligence with Einstein Analytics.

FinancialForce has exhibited some of the bumps in the road to be expected of a growing vendor as it matures. The reallocation of investment dollars in its core capabilities bodes well for its customers continuing to realize positive value from FinancialForce. Although customers often cite the native integration as a primary differentiator for FinancialForce, ensuring that its PSA and core financials continue to be competitive should help the vendor capture more customers that aren't current or prospective Salesforce customers.

INFOR

Infor continues as a Leader in the 2017 ERP Technology Value Matrix with its vertically-focused CloudSuite offerings delivering value to customers. Although still offering on-premises versions of its ERP products, Infor has a cloud-first strategy across both its enterprise and mid-market offerings. Infor's ERP solutions enterprise industry verticals for aerospace and defense, automotive, industrial machinery, food and beverage, fashion, distributed enterprise, equipment rental, corporate management, and healthcare, with mid-market verticals for industrial, process manufacturing, distribution, and business services.

Infor is tackling the challenge of migrating many of its 90,000 customers from legacy systems such as Fourthshift, SWAN, and others to Infor CloudSuites which have at their core the latest cloud-enabled Infor LN, M3, Lawson, and SyteLine solutions as well as selling each of these to new customers. For each solution, Infor

has made CloudSuites available to address industry verticals. For example, Infor M3 is the hub for equipment, fashion, chemicals, distribution, and food and beverage, and is available on-premises or in the cloud via four CloudSuites. An additional example is Infor SyteLine, which is now called Infor CloudSuite Industrial and focuses on small- and medium-sized businesses that engage in discrete industrial processes such as automotive, high tech, aerospace and defense, and industrial machinery and equipment. The CloudSuites are delivered on the Infor OS platform which includes extensibility capabilities via ION middleware, Infor Ming.le, Infor's business collaboration solution, and Infor Document Management.

Infor has continued to make investments and acquisitions to expand its solution footprint, such as buying GT Nexus in 2016 to expand its supply chain capabilities and more recently, the analytics vendor Birst. At its user conference, Infor announced Coleman, a product designed to leverage AI and machine learning that is embedded in Infor's OS Platform and helps deliver insights to users. With a large number of customers on a variety of legacy ERP systems, Infor must demonstrate superior value in its latest offerings or risk losing customers when they decide to upgrade. Additionally, moving enterprise customers to its public cloud offering rather than private cloud or on-premises deployments depends greatly on its ability to deliver deep industry-specific capabilities in its CloudSuites out of the box. With solutions covering a large variety of customers and industries, Infor's vertical focus should continue to pay dividends to its cloud customers moving forward.

MICROSOFT

Microsoft continues as a Leader in the 2017 ERP Technology Value Matrix having made strides toward achieving its vision of delivering its productivity and enterprise applications with Dynamics 365 for Finance and Operations, Enterprise edition, delivered on an integrated business application platform on its cloud infrastructure. Microsoft recently announced a retail-focused module, Dynamics 365 for Retail, to go along with verticalized offerings in manufacturing, distribution, professional services, and public sector. Off the back of its acquisition of LinkedIn, Microsoft also recently put into public preview its cloud-based human capital management capabilities in Microsoft Dynamics 365 for Talent, which is added to the existing financial and supply chain management capabilities. For Microsoft, the focus has been on delivering new capabilities to the cloud first, although it did release an on-premises deployment option in its July 2017 update. Microsoft also has its hybrid cloud configuration in developer preview, which enables customers to keep edge applications on-premise while leveraging the cloud for scale and data aggregation.

Designed for small and mid-sized businesses, Dynamics 365 for Finance and Operations, Business edition is Microsoft's Software-as-a-Service (SaaS) solution,

joining the Dynamics NAV and Dynamics GP on-premises offerings. Built on the NAV platform, Microsoft delivers NAV functionality in the Business edition which includes core financials, sales, purchasing, inventory management, and project management, with additional components on the roadmap. Despite requiring a new extension model, partners can develop extensions on top of the Microsoft code and will have an easier time upgrading any added pieces when the ERP is updated every quarter. Designed to be easy to implement, Business edition is delivered on Azure infrastructure and can take advantage of the platform capabilities delivered in the enterprise version of the software.

All the enterprise capabilities in Microsoft Dynamics for Finance and Operations, Enterprise edition are underpinned by Microsoft's global delivery strategy that includes 36 geographies and over 60 language localizations. Customers can also subscribe to services that help with regulatory compliance and reporting. Additionally, Microsoft business application platform delivers capabilities such as PowerApps, Power BI, Microsoft Flow, and Common Data Service, helping customers better collect and analyze their data as well as build applications to automate manual tasks. Microsoft is working to ensure that it includes its independent software vendor (ISV) and partner ecosystem in its cloud strategy. To that end, Microsoft offers over 120 solutions built by ISVs on its AppSource marketplace. Lastly, Microsoft's cloud customers leverage the Microsoft Dynamics Lifecycle Services, which help customers manage their ERP throughout its lifespan, making implementations more predictable and standardized.

The improvements Microsoft has made to both its enterprise and SMB ERP products deliver value to customers, leveraging cloud capabilities and integrated applications. Although the vendor has taken steps to not leave behind parts of its partner community, the ecosystem continues to evolve as partners and ISVs switch from custom projects and continued maintenance to onboarding and adoption assistance as well as application and extension building. As the partner ecosystem matures to catch up with Microsoft's cloud application strategy, customers stand to benefit and realize greater value overall.

ORACLE

Oracle continues as a Leader in the 2017 ERP Technology Value Matrix with its focus squarely on its ERP Cloud product suite and SaaS offerings. Seeking to address the needs of nearly every business, Oracle's solutions consist of financials, project portfolio management, procurement, enterprise performance management, supply chain, and risk management. In the latest releases, Oracle has continued to enhance the user experience, improve and streamline business processes, provide better insights and reporting, and make integrating and extending the solution easier.

Oracle also added industry capabilities to verticals such as financial services, higher education, and manufacturing.

Oracle seeks to be the end-to-end cloud solution for enterprise customers, offering human capital management, customer relationship management, and supply chain management to complement its ERP suite. With a modern UI, customers can tailor the solution to deliver the information based on user or role with context sensitive graphics that can be drilled into to gain access to the underlying data. The UI also facilitates mobile functionality and real-time analytics that provide insights on KPIs that help decision makers. Oracle also provides customers with the full technology stack, with Platform-as-a-Service (PaaS) and Infrastructure-as-a-Service (IaaS) products that extend its value proposition.

Although the focus for Oracle has been on its enterprise SaaS, Oracle still offers legacy solutions such as JD Edwards, E-Business Suite, and PeopleSoft. Oracle has continued to invest in these solutions to deliver the latest modern capabilities to the cloud and ensure that customers are receiving value as they transition to cloud leveraging Oracle's IaaS and Database-as-a-Service. With deep industry-specific expertise, customers count solutions like JD Edwards and E-Business Suite as a competitive advantage (Nucleus Research, *R21 – A Conversation with Oracle JD Edwards*, February 2017). As Oracle's push to the cloud continues and its associated services mature, customers should expect Oracle's ability to quickly deliver value to improve.

ROOTSTOCK

Rootstock is a Leader in the 2017 edition of the ERP Value Matrix, having made significant strides to become a one-stop-shop for its customers. A new addition to the last Value Matrix, Rootstock traditionally focused almost exclusively on manufacturers in high-tech, electronics, machinery, industrial equipment, engineered-to-order, and project-centric businesses. In 2017, Rootstock added a financials module that supports multi-currency, multi-company organizations, rather than relying on partners such as Intacct or FinancialForce as it had done in the past.

Customers realize value from the best-of-breed approach that Rootstock brings to the Salesforce platform, on which it is natively integrated. Rootstock is certified on Salesforce Lightning environments and is looking at the possibilities of leveraging the capabilities of Einstein Analytics. Due to its manufacturing expertise, Rootstock finds almost half of its deployments independent of whether the prospect is on or considering Salesforce. Though when Salesforce is in the mix, Rootstock's native integration is a significant differentiator (Nucleus Research, *R99 – Rootstock*

Software ROI Case Study – 1st Light Energy, May 2017; Nucleus Research, R100 – Rootstock Software ROI Case Study – Pro-Tech, May 2017).

By adding core financials, Rootstock is able to deliver a more comprehensive solution for its manufacturing customers. Keeping pace with the latest developments on the Salesforce platform should ensure that Rootstock's customers can continue to take advantage of new analytics and UX capabilities.

SAP

SAP is a Leader in the 2017 ERP Technology Value Matrix, delivering a host of solutions with industry capabilities that help customers realize value. SAP's focus in the enterprise space has continued to be on its S/4HANA and S/4HANA Cloud solutions. SAP gives customers a choice when deploying, offering the same source code, UI, and data model whether the solution is implemented on-premises, via private cloud on SAP's HANA Enterprise Cloud, or on a partner's Infrastructure-as-a-Service cloud such as Microsoft Azure, Amazon Web Services (AWS), and Google Cloud Platform. S/4HANA Cloud is SAP's SaaS ERP solution and shares the same data model as S/4HANA. S/4HANA is designed to function as the center of the enterprise in a variety of use cases such as managing core finance, enterprise management, professional service management, and manufacturing planning and execution.

Sitting adjacent to the ERP, SAP offers a suite of products that it is natively integrating including SAP SuccessFactors for human capital management, Concur for travel and expense management, SAP Hybris for omnichannel commerce management, SAP Ariba for source-to-settle procurement, and SAP Fieldglass for external talent management and services procurement. SAP also delivers extended capabilities such as warehouse and transportation management, supply chain solutions via SAP Integrated Business Planning, manufacturing execution, and analytics.

Of particular focus at SAP's recent user conference was the announcement of SAP Leonardo, which is designed to bring together and operationalize technologies such as Big Data, IoT, machine learning, AI, and advanced analytics. Positioned as a Digital Innovation System, SAP hopes Leonardo will help enterprises take on new business models and better leverage the in-memory capabilities delivered with the S/4HANA platform. S/4HANA is critical to SAP Leonardo scenarios in machine learning and IoT, building a foundation that can unify transactional and analytical workload in real-time.

With quarterly updates, S/4HANA Cloud continues to receive functional improvements such as hundreds of additional APIs and extension applications, as well as a co-pilot with contextual analytics to help users navigate any issues. Recent updates also included 23 machine learning enabled scenarios such as identifying patterns in cash payments to help users automate tasks. The most recent update, 1708, focused on automating finance tasks in treasury management, as well as improvements to demand-driven replenishment for manufacturing, to name just a few. The latest release of S/4HANA on-premises and private cloud option, 1709, delivers machine learning, predictive analytics, and innovations across lines of business, aligned with the expansion of SAP Leonardo technologies.

SAP is working with its partners to address customer requirements, offering in-app extensibility via its cloud platform. Customers can find industry-specific tools and localization or develop their own customizations using Cloud Foundry. The Fiori UI allows customers to configure the system themselves and bring their own applications to the solution, regardless of language. SAP plans to release a development kit this year that will enable partners in the ecosystem to write their own applications. Looking to deliver 60 localizations this year covering 85 percent of the commercial world, SAP is focused on developing 100 percent of core ERP in the cloud and a degree of industry-specific functionality out of the box, relying on its partner ecosystem to deliver more depth on verticals.

SAP Business ByDesign continues to be SAP's mid-market cloud offering, delivering value with its extensibility and ability to match customer needs. With nearly 10 years of expertise behind the solution, Business ByDesign delivers a suite in a box with pre-integrated capabilities beyond the general ledger. Able to scale significantly, customers do not risk outgrowing ByDesign with multinational subsidiaries using at a maximum only 50 percent of the capabilities included in the product. Functioning as an outsourced part of a customer's innovation department, SAP helps customers leverage technologies such as machine learning, IoT, and Big Data, ensuring that mid-market companies enjoy the same benefits as enterprises.

Business ByDesign operates in 120 countries and delivers positive value through its ability to extend its service the exact needs of the customer. SAP allows customers to build extensions and add-ons to the solution to address their industry needs with data transferred via web services. Customers rely on SAP to ensure that applications and extensions are not damaged during upgrades. The vendor relies on its partner ecosystem to right-size the solution to the customer's needs, providing an app center for partners to market their specific industry expertise.

SAP is investing in bringing more capabilities to its cloud ERP offerings and making it easier for its customers to make the jump. On the roadmap is the option for customers to spin up their own configuration of S/4HANA Cloud, creating self-service capabilities that will take advantage of built-in industry best practices and increase the overall product usability. As the cloud ecosystem continues to mature, SAP's ability to deliver value will improve.

SYSPRO

SYSPRO remains a Leader in the 2017 edition of the ERP Value Matrix, focusing on manufacturing and distribution. Keeping with the theme of micro-verticals, SYSPRO specializes in automotive, food and beverage, industrial machinery, metal fabrication, electronics, packaging, plastics and rubber, and medical devices. Built from the ground up, SYSPRO has a single source code that allows integrations based on its Service Oriented Architecture (SOA), making it extensible to fit a customer's use case. Additionally, the vendor has made strides in the last year to gain more traction in its cloud business, delivering its products hosted, on-premises, and in the cloud.

SYSPRO has continued to invest in its mobile solution called Espresso, giving users access to the ERP system on any device or operating system. Espresso uses the .NET framework, giving customers the ability to design and build their own applications as well as draw from third-party elements. SYSPRO's investment has also been focused on a new UI, featuring SYSPRO Chat Bot AI which is designed to assist users with a host of ERP tasks such as price queries, order status inquiries, and stock lookups. The chatbot can be accessed from any messaging application such as Skype or Facebook Messenger. SYSPRO is leveraging Microsoft's Azure Machine Learning Studio to support the AI framework and cognitive services for its chatbot.

In an effort to make implementations easier for customers, SYSPRO has developed a five-step process: initiate, design, engineer, actualize, and leverage. At each step, SYSPRO outlines industry best-practices to ensure that the implementation goes smoothly. With the full suite of innovative technologies such as AI bots, IoT, and mobile functionality, SYSPRO competes with any vendor on delivering disruptive capabilities in the mid-market.

EXPERTS

Experts in the 2017 ERP Technology Value Matrix include: Aptean, IFS, and QAD.

APTEAN

Aptean is an Expert in the 2017 ERP Technology Value Matrix, able to manage operations from supplier and planning to manufacturing, distribution, and logistics. Aptean focuses on several industry verticals, including food and beverage, healthcare, automotive, retail and general consumer packaged goods, and industrial manufacturing. With a greater focus on integrated solutions between supply chain management, manufacturing execution, and distribution, Aptean customers are buying in a phased approach, leveraging the flexibility they have to tailor the system to their needs.

In terms of innovation, Aptean is focused on delivering drones, IoT deployments, and AI capabilities, as well as integrating its solutions for customers that are deploying multiple products. Aptean also consults with its customers on what capabilities customers have developed that should be brought into the core product as industry best practices. As a result, customers are incentivized to keep their ERP systems current, as they can eliminate customizations that are now delivered as part of the main product (Nucleus Research, *R150 – Aptean community delivers continual value*, August 2017).

Aptean focuses on delivering value from the start of its engagement with customers, carrying out ROI analyses of performance and run-rates for manufacturing and execution, as well as consultations on continuous improvement as part of maintenance. As the vendor integrates more of its systems to deliver its end-to-end suite in a single package along specific industry verticals, its position in the Value Matrix should improve.

IFS

IFS is an Expert in this edition of the ERP Value Matrix, delivering both manufacturing and project-centric ERP products along with enterprise asset management (EAM), and field service management (FSM). Available in the cloud or on-premises, IFS goes to market with industry-specific software solutions available via SaaS or perpetual license covering aviation, automotive, engineering, construction, and infrastructure, energy and utilities, industrial, process and high-tech manufacturing, oil and gas, asset-intensive, and service providers.

IFS continued its aggressive acquisition activities that were noted in the last Value Matrix, completing the purchase of Mxi Technologies Ltd early in 2017, as well as two UK-based firms, mpsystems Limited and Field Service Management Limited, in August. Mxi adds to IFS' aviation vertical delivering best-of-breed maintenance management to third-party Maintenance, Repair and Overhaul companies, as well as defense and commercial organizations. Mpsystems and Field Service

Management extend IFS' Service Management capabilities, with Field Service Management an existing implementation partner for IFS and mpsystems an expert in deploying omnichannel contact management platform. IFS has been investing in its Field Service Management solution in addition to acquisitions, including an embedded integration with IFS IoT Business Connector in the latest version of the software. The Connector helps companies more easily connect devices and start to analyze data, leading to improved service levels and value for the customer (Nucleus Research, *R156 – IFS invests in Field Service and IoT Enablement*, August 2017).

Enhancements to the user experience and support for mobile functionality helps deliver a better experience to technicians in the field. To improve usability of the product, IFS is delivering intelligent task automation as well as quarterly software updates, removing the need to implement service packs. The more consistent cadence of product releases helps companies plan their upgrade and ensure they are taking advantage of the latest product capabilities. With a global presence, IFS can support tier-one enterprises in any market, seeking to become customers' trusted advisers.

QAD

QAD is an Expert in the 2017 edition of the ERP Value Matrix, focused squarely on manufacturing and specializing on six industry verticals: automotive, life science, high tech, industrial, consumer products, and food and beverage. Relying primarily on direct sales and with no outsourced support, QAD delivers value to the mid-market by working closely with customers to ensure that the software grows with them. QAD had developed its own cloud management layer so it can work with customers to select the best in class cloud service providers based on the customer's geographic needs, benefitting global customers in particular.

In 2017, QAD has focused its innovation on a few areas including continuing to update its UX, architectural foundation, and vertical capabilities. The UX, on which work began three years ago, incorporates HTML5 and is natively built for mobile devices improve product usability. QAD also developed pre-configured solutions for each of the major industries it serves, helping customers deploy quickly and leverage industry best practices. Additionally, QAD developed platform extensibility that helps customer and partners build applications using open APIs (application program interfaces). QAD has also worked to increase automation and enable its customers to implement IoT projects.

With some enhancements delivered on a continuous basis and a significant update scheduled every six months, QAD will continue to make strategic investments, adding to the industry verticals in which it specializes, as well as delivering new

analytic capabilities. QAD is dedicated to helping its customers adjust to changes in their industry, touching base each year to ensure it is delivering value. The innovations QAD has on the roadmap should improve the value it delivers to its customers.

FACILITATORS

Facilitators in the 2017 ERP Technology Value Matrix include: Epicor, Kenandy, NetSuite, Qualiic, UNIT4.

EPICOR

Epicor is a Facilitator in the 2017 ERP Technology Value Matrix. In May, Epicor released a new version of its ERP system, Epicor ERP, specializing in manufacturing micro-verticals aerospace and defense, electronics, fabricated metals, industrial machining, medical devices, and rubber and plastics to name only a few. The new release also features fully integrated enterprise content management (ECM) capabilities from the acquisition of DocStar, which was completed in January 2017.

The latest version of Epicor ERP is being offered in a dedicated cloud tenancy deployment, which provides each client with its own database. This is in addition to the multi-tenancy and single-tenancy deployment options already offered. There is also expanded international financial applications and electronic compliance engine, as well as enhanced data analytics. There were also enhancements made to its configure-to-order design function as well as its automated shipping software streamline processes. Epicor is investing in ensuring its solutions are ready for Industry 4.0 and able to leverage IoT, Big Data, and analytics. With a focus on mid-sized manufacturing, Epicor is looking to future-proof its solutions so it can help its customers innovate and grow.

In addition to a new UI in the coming release, Epicor has its Field Service Automation solution on the roadmap. The combination of mobility and extensibility should help customers operating in the field integrate the applications they need, as well as leverage the new Epicor Mobile CRM, which has been taken from ecosystem add-on to full-fledged product. With an update cadence of every six months, Epicor is encouraging its customers to stay current, offering a single, consistent support system as well as flexible upgrade windows. With the coming update to UI and expanded functionality, the position of Epicor in the Value Matrix should improve in the future.

KENANDY

Kenandy was a new addition to the ERP Value Matrix in 2016 and is once again in the Facilitator Quadrant. Kenandy is a Cloud ERP solution built on the Salesforce platform, focusing its product on order-to-cash, manufacturing, supply chain, financials, and distribution. Being Lightning-ready and flexible means that Kenandy provides solutions out of the box for most customers. It also means that customers familiar with Lightning will find that Kenandy possess an intuitive interface that is user-friendly. Flexibility is added by mobility and collaboration tools that allow customers to respond to changing environments while also providing them with greater visibility. With Kenandy, manufacturing companies can manage inventory, warehouses, and orders, while increasing procurement automation, as well as greater automation for the financial reconciliation and close. Continued development of capabilities that leverage the analytic engine on the Salesforce platform should help customers achieve additional insights and value.

NETSUITE

NetSuite is a Facilitator in the 2017 ERP Technology Value Matrix. Since its acquisition by Oracle, NetSuite has focused on expanding its reach across the globe, touting its use of Oracle data centers as enabling it to support existing customers as well as pursue new prospects in Europe and Asia. In addition, NetSuite is increasing the number of company offices it operates from 10 to 23 to better serve customers. At its recent SuiteWorld user conference, NetSuite announced general availability of its SuiteSuccess engagement model, in which NetSuite currently caters to eight industry verticals: advertising/media, financial services, manufacturing, retail, non-profit, software, services, and wholesale distribution, with solutions built for micro-verticals within markets for a total of 12 different SuiteSuccess editions.

NetSuite delivers two major updates each year with a host of functional improvements to its OneWorld ERP solution in financials, revenue recognition, billing, resource planning, supply chain, and risk and compliance. With each update, all of NetSuite's customers are automatically moved to the latest release, enabling customers to take advantage of new capabilities. Consistent with its global expansion strategy, NetSuite is focusing on helping global companies automate and simplify financials in multi-company and multi-country situations. NetSuite is also delivering revenue management capabilities that help customers stay compliant with the ASC 606 revenue standard. NetSuite's investment in new capabilities is bolstered by Oracle's financial backing, ensuring a steady stream of functional improvements in the future. Of note are the investments that NetSuite is making in delivering the next generation of analytics and reporting capabilities to its product lineup.

QUALIAC

Qualiac continues to rate as one of the highest vendors in usability in the Matrix because of its high degree of configurability and embedded analytics and dashboards that can be easily customized and consumed by business users with limited IT intervention. Additionally, the high level of traceability of data at a granular level has made it popular in operations such as hospitals, where data audit trails are particularly of consequence. Qualiac has continued to increase its footprint both in North America and Europe with new customer deployments in North America and a joint venture in Spain. Qualiac's biggest challenge is increasing its ability to attract customers and build momentum in the North American market, where its penetration has been historically limited. Nucleus expects the company will maintain a strong usability ranking in the Matrix although lack of productization of industry-specific expertise may negatively impact its functionality rating against competitors.

UNIT4

Unit4 is a Facilitator in the 2017 ERP Technology Value Matrix, with a focus on people-centric businesses such as professional services, higher education, public services, and not-for-profit. Since the last Value Matrix, Unit4 has been focused on improving the automation of its solution with more self-driving software. For example, Unit4 released automated time sheets with its spring release, helping users manage by exception and gain value from real-time insights provided by analytics that help keep project-centric businesses on track.

Unit4 is continuing to invest in these capabilities, such as its digital assistant, Wanda, which helps eliminate non-value adding tasks. Wanda can assist with purchasing, time keeping, travel expenses, human resources, and approvals. With natural language process and operating on the Microsoft Azure platform, Unit4 is looking to ease customers' administrative burden. To that end, Unit4 also released a new module called Project 360 Workspace along with dashboards designed for professional service organizations, focused on project management through better control and monitoring of an organization's operations. Additionally, Unit4 has invested in capabilities to help asset lifespan with field service mobility and service planning features.

Having built many of its capabilities from the ground up, Unit4 is positioned to continue innovating and delivering value to its customers around the world after re-engineering its platform and investing in capabilities that target productivity. As it continues to push for greater automation and time-saving functionality, Nucleus expects its ability to deliver value to improve.

CORE PROVIDERS

Core Providers in the 2017 ERP Technology Value Matrix include: IQMS, Plex, Sage, VAI.

IQMS

IQMS is a Core Provider in the 2017 ERP Technology Value Matrix, bringing together Manufacturing Execution System (MES) software and ERP in a single system. Focused on verticals manufacturing verticals such as plastics, stamping and metals, food and beverage, aerospace and defense, packaging, medical, automotive, and process-specific industries, IQMS has made strides to move up-market, servicing the needs of global enterprise customers as well as small- and medium-sized companies. IQMS gives customers a choice of how they want to deploy be it as SaaS in a managed cloud environment, hosted licensed software, or on-premises perpetual license.

Last year, IQMS debuted its WebIQ user interface, helping users leverage HTML5 browser-based functionality. Though not optimized for small screens yet, IQMS is continuing to make investments increasing usability without sacrificing depth of functionality. Offering a new support package designed to foster continuous improvement amongst its customers, IQMS looks to deliver additional value to existing customers with quarterly account reviews to determine where engineers can make improvements, as well as offering monthly virtual training sessions. IQMS is also committed to new customers achieving value by building business cases for prospects with the goal of a positive ROI within a year of deployment. Continued movement up-market and additional improvements to usability should see IQMS' position in the future iterations of the Value Matrix improve.

PLEX

Plex maintains its position in the 2017 Technology Value Matrix as a Core Provider. The Michigan-based ERP vendor has made a few notable announcements since the last Value Matrix that are bringing value to customers. In March, Plex announced the availability of IntelliPlex Production Analytics Application, an addition to Plex's IntelliPlex Analytic Application Suite which uses Industrial Internet of Things (IIoT) to provide manufacturers with insight into their processes and equipment performance, providing an overview of overall production operations. Specifically, the application provides information on important performance measures such as overall equipment effectiveness (OEE), scrap rates, first pass yield, inventory turns, on-time jobs and machine availability.

In May, Plex announced a new analytic application, the IntelliPlex Supply Chain Analytic Application, which produces a dashboard for strategic programs such as inventory and material management, customer success, and enterprise supplier performance. Depending on the category, customers will be able to track data by supplier, part, material, type, location, as well as things like average days to ship, on-time fill rate, customer lead time, and spend by supplier. This furthers Plex's work to make it easier for manufacturers to use and manage data in their businesses. Plex uses Microsoft Azure to ensure scalability and connectivity for its customers, while also allowing users to pull their data into Microsoft Office 365.

Looking to the future, in May Plex announced that plans to add predictive demand forecasting and machine learning to the Plex Supply Chain Planning Suite. Predictive Demand Forecasting is scheduled to be rolled out in the fourth quarter of 2017, while Plex Machine Learning is planned for the first quarter of 2018. Once operationalized, customers should expect to benefit from the innovative capabilities on Plex's roadmap.

SAGE

Sage is a Core Provider in the 2017 ERP Technology Value Matrix, offering solutions for small, medium, and enterprise customers. Sage's main ERP offering, called Sage X3, is offered with on-premise, SaaS, or hosted deployment solutions. Sage covers a wide range of industries, including construction, distribution, manufacturing, services, and process manufacturing. Sage X3 provides customers with solutions for purchasing and vendor management, warehouse and inventory management, sales and marketing, as well as accounting.

To deepen its accounting capabilities, Sage acquired Intacct accounting software for \$850 million in July. It remains to be seen what Sage will do with the Intacct acquisition, but the move shows significant intent by the vendor to compete in new markets where it has not traditionally had expertise. Intacct competes with the likes of FinancialForce and NetSuite, and has 11,000 customers of its ERP software. As Sage integrates Intacct into its core product offering, customers should expect to benefit from the new capabilities and realize additional value.

VAI

VAI (Vormittag Associates, Inc.) is a Core Provider in the 2017 ERP Technology Value Matrix, providing software solutions to midmarket customers. VAI's flagship ERP product, S2K Enterprise, covers customer needs in manufacturing, distribution, financials, and retail and service, and can be deployed on-premises or in the cloud. S2K Enterprise covers customers in several industries including automotive, electronics, plastics, medical products, industrial equipment, building and electrical

supply, and apparel, with two industry-specific solutions for food and pharmaceutical customers.

In 2017, VAI announced the launch of S2K Enterprise 6.0, which delivers a browser-based interface and HTML5 client that works on any device. VAI also supplies a library with over 100 pre-built portlets based on user-specific visuals. Customers can also develop their own portlet to service their specific industry needs. The new release helps improve usability as well as delivering an analytics application that leverage IBM Cognos. On the product roadmap, VAI is starting to work with IBM Watson to provide additional analytics capabilities. VAI gives all new customers a test drive of the cloud for the first six months to a year, encouraging customers who might otherwise opt for on-premises deployments to adopt cloud. Additional investment in innovative capabilities like AI and IoT should help VAI keep pace with the market in future iterations of the Value Matrix.