

MARKET OVERVIEW (CUSTOM)

Innovations Abound in Global Cloud ERP Suites

Refresh Cycle Bodes Well for Clients Seeking Upgrades or Migration from Legacy ERP



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EXECUTIVE SUMMARY

The confluence of an improved market outlook, the shift to the cloud, the pressure of digital transformation and replacement cycle dynamics has created one of the biggest growth opportunities for enterprise resource planning (ERP) refreshes. New cloud deployments provide a catalyst for improving and automating back-office processes like never before.

This Market Overview examines the wide range of cloud ERP solutions on the basis of product- versus services-centric offerings and unregulated versus regulated solutions. While the number of vendors in the market has diminished due to mergers and acquisitions, the consolidation has led to concentrated platform investments in the cloud and exponential technologies such as artificial intelligence (AI), big data, augmented reality, the Internet of Things, 5G, and blockchain.

Successful deployments will achieve the elusive goal of improving efficiencies and preparing for exponential growth. The use of AI in the back office will power the next wave of post-digital ERP advancements.





MARKET DESCRIPTION

Market Definition

Enterprise resource planning (ERP) refers to a transactional system that manages the back-office functions of an enterprise: finance, human resources, supply chain and logistics, and project management. Cloud-based systems refer to a deployment option where the software is hosted on a vendor's server. Multitenant cloud solutions refer to a deployment option where only one copy of the software code is available to all customers, though the data is unique to each customer.

Modern global cloud ERP suites encompass a wide range of end-to-end business processes, including:

- Procure to pay
- Order to cash
- Hire to retire
- · Assess to acquire
- Financial plan to report
- Project initiation to project closure

Constellation Research estimates the global cloud ERP market will be worth \$40.1 billion by 2025 and have a compound annual growth rate of 9.3%. Surveys among customers show that BFSI (that is, banking, financial services and insurance) is the top industry and North America is the top market. Key vendors in this Market Overview include: Epicor, FinancialForce, Infor, Microsoft, Oracle, Oracle NetSuite, Sage, SAP, Unit4 and Workday.

Market Trends

Global cloud ERP evolved from the post-digital ERP era to the AI-driven back-office era. In fact, the post-digital ERP era began in 2010 with new architectures built for the cloud and massive data sets. Since then, innovations in post-digital ERP have ushered in a wave of new technology platforms, user experiences and intelligence as well as new opportunities to drive down the cost of ownership while

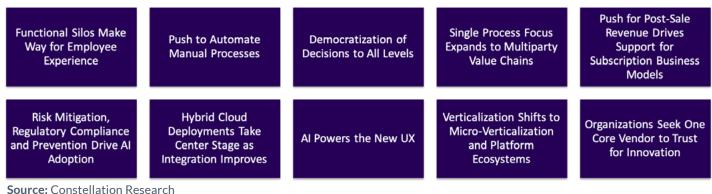


enabling constant streams of innovation. Constellation sees a shift from transaction systems to Aldriven systems (see Figure 1).

In our conversations with more than 200 technology leaders, 10 major trends have emerged for 2020 and beyond for post-digital ERP users:

- 1. Functional silos make way for employee experiences. When ERP systems emerged in the 1980s, they solved subdepartmental issues such as accounts receivable, accounts payable and treasury. Over time, ERP grew to include departmental components such as finance, HR applications, procurement, supply chain and manufacturing. As mega-ERP suites debuted, the notion of a single source of truth emerged for the back office. With information centralized in the cloud, ERP today can deliver the key system of record for an enterprise and the foundation for better employee experiences. These employee experiences augment human decisions to enable next-best actions.
- 2. The push to automate manual processes drives sustainable efficiency. A plethora of human-managed manual processes often drives up the cost of ownership for ERP. Given the exponential volume of data, the highly repetitive nature of work and the massive nodes of interaction, over 70% of back-office processes make great candidates for automation. Early adopters often choose automation tools such as robotic process automation (RPA) and process mining to deliver a significant return on investment and help reduce operational overhead and costs.

Figure 1. Ten Global Cloud ERP Trends for 2020 and Beyond





- 3. Organizations deliver democratization of decisions at all levels. Information in older ERP systems mostly provided power users with key insights. Employees, casual users and partners didn't have the same level of access. However, modern back-office environments empower all users with contextually relevant information. The shift from hoarding information to delivering the right information at the right time, for the right context, in the right form factor and in the right security model now means every employee, contractor and partner can be empowered with information to speed decision-making, improve customer experience and mitigate risk.
- 4. Single-process focus expands to multiparty value chains. Classic mega-processes such as invoice to close, procure to pay, hire to retire and order to cash traversed functional fiefdoms. Early adopters of cloud ERP seek multithreaded value chains that support a multiparty-centric view. These parties could include the employee, customer, supplier, partner and others. The convergence of classic mega-processes makes way for multiparty value chains. Context is key as each role sees only the relevant information at the right time.
- 5. Push for post-sale revenue drives support for subscription business models. The shift from ownership to access requires ERP systems to support subscription business models. These new models enable post-sale revenue opportunities such as installation, warranty and vendor-managed inventory. Subscriptions also require regulatory compliance for revenue recognition rules such as ASC 606. Expect ERP to provide growing support to customer success management platforms and new outcomes-based pricing models.
- 6. Risk mitigation, regulatory compliance and fraud prevention drive adoption of artificial intelligence (AI) in ERP. While AI has many use cases, fraud prevention helps organizations avoid bad outcomes. Prevention applies cognitive reckoning to identify potential threats. The goal is to mitigate risk, achieve regulatory compliance and prevent disasters. Customers also seek AI to augment human decisions and suggest next-best actions.
- 7. Hybrid cloud deployments take center stage as integration improves. The shift to the cloud comes with multiple deployment options. Most organizations have cloud components tied to an onpremises core. Over time, an increasing number of deployments will shift from hybrid approaches



to pure cloud models. Consequently, integration technology has improved in ease of use, ability to orchestrate and cost of ownership.

- 8. Al powers the new user experience. From chatbots to mixed reality, Al has entered the ERP market. Systems that mimic four out of the five senses—sight, speech, listening and touch—have entered the mainstream. Natural language processing and video intelligence enable large quantities of unstructured data such as documents, chats, log files and transactions to be ingested and organized into logical categories using techniques such as topological data analysis. Customers expect the ability to use voice as an interface as much as touch and gestures.
- 9. Verticalization shifts to micro-verticalization and platform ecosystems. Customers expect their cloud-based ERP solution to deliver on deep industry vertical functionality. Customers also expect their ERP vendor to provide integration support for adjacent solutions in the ecosystem. Why? Years of experience have taught customers that they need a platform to extend as well as one that is part of a larger ecosystem.
- 10. Organizations seek one core vendor to trust for innovation. The ERP market landscape has shrunk from hundreds of vendors to a dozen core providers. During the merger and acquisition binge over the past decade, customers have emphasized the stability of a vendor over innovation. With a refresh cycle ahead, customers have increased their expectations to obtain both stability and innovation from one core vendor.



IMPORTANCE TO BUYERS

Buyer Challenges

Enterprises and brands considering new ERP systems must compare the current state and future state requirements of their existing legacy on-premises customizations with the out-of-the-box configured requirements of cloud-based ERP systems. In many cases, legacy on-premises ERP systems may have outlived their useful lives in terms of supporting both regulatory requirements and integration with newer technologies.

Integration with existing and new systems is one of the most significant factors in migration from onpremises to cloud-based ERP systems. In addition, the market has rapidly consolidated around a dozen ERP suites with varying degrees of cloud deployment options.

Buyers must consider their requirements for deployment options that range from hosted single-tenant, multi-instance cloud to true multitenant SaaS.

Inclusion Criteria

Key vendors in this market do the following:

- Support two or more mega-business process flows
- Support North America or EMEA and one other geography
- Have more than 100 deployed cloud customers
- Have at least 500 overall customers
- Generate more than US\$100 million in overall revenues



VENDOR LANDSCAPE

Vendors & Offerings

Today's post-digital cloud ERP offerings represent emerging and full-suite capabilities. With more than two-dozen potential solutions, Constellation's latest Market Overview assesses the 10 most common solutions among clients including Unit4:

Unit4 Business World

The Utrecht, Netherlands-based provider of enterprise applications generated more than €500 million in revenue with 3,200 worldwide employees. The offering is available in 20 countries. Unit4 launched the cloud deployment option in 2013 and has 475 customers deployed in the cloud. With 2,500 Unit4 Business World customers, the vendor provides a full suite of services-centric ERP offerings in onpremises, hosted and cloud-based deployments.

Unit4's midmarket customer base ranges from US\$250 million to US\$1 billion in revenue and 200 to 10,000 employees. Unit4 Business World delivers a full ERP suite of financial management; human resources and payroll; planning, budgeting and forecasting; procurement management; project management; and enterprise asset management services-centric offerings. Unit4 releases two major updates a year. The focus on a people-centric approach aligns with the vendor's key industries of professional services, education, public services, nonprofits, real estate, wholesale and financial services.

The latest release takes advantage of the People Platform, which includes personalized experiences, industry-specific capabilities, smart automation services for self-driving ERP, and the Extension Kit, which through its low-code/no-code approach makes it easier for Unit4 customers to quickly integrate with key information sources and external services. Customers tend to select Unit4 Business World for its flexible configuration capabilities, deep vertical expertise, midmarket focus and people-centered design philosophy.

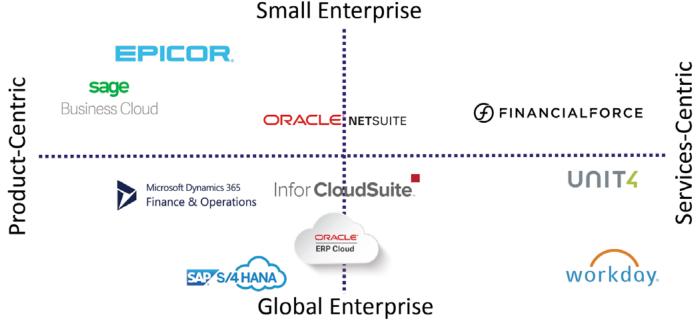


Differentiation

Constellation evaluates the global cloud ERP offerings using the following five points of differentiation:

1. Product-centric vs. services-centric. ERP systems often support either a product (things) or a services (experience) point of view. While a few solutions can address both, specialization has often bifurcated into things versus experiences in order to successfully meet customer requirements (see Figure 2).

Figure 2. ERP Styles Include Product-Centric, Services-Centric or Both

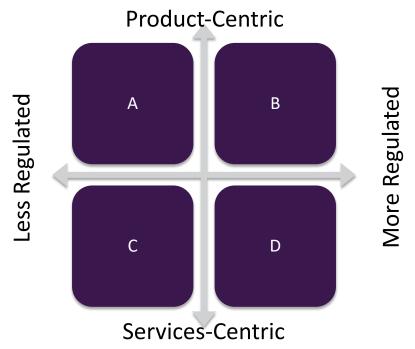


Source: Constellation Research

2. Regulated vs. nonregulated industries. Regulated industries often require constant updates for compliance. The ability to write once and deploy to every customer at the same time is a significant differentiator for cloud deployment. Cloud vendors supporting regulated industries dedicate teams to translate legislative action into software updates (see Figure 3).



Figure 3. ERP Differentiation by Type and Regulation



Source: Constellation Research

- **3. Industry support and specialization.** One of the most critical requirements will be industry fit. Customers seek micro-vertical industry specialization and expect solutions to be built for their industries with minimal customization and added professional services costs.
- **4. Deployment options.** Cloud ERP solutions often refer to multitenant SaaS deployments. However, some solutions offer deployment choices that include multi-instance, single-tenant cloud; hosted solutions; and on-premises delivery (see Figure 4).
- 5. Suite-centric vs. best of breed. A few best-of-breed solutions remain in the ERP market. However, massive vendor consolidation over two decades has led to suite-centric solutions. Today's global cloud ERP suites often span more than one mega-process such as procure to pay, order to cash, hire to retire, assess to acquire, financial plan to report and project initiation to project closure.



Figure 4. Deployment Options Span Many Flavors of On-Premises to Cloud

VENDOR	ON- PREMISES	HOSTED SOLUTION	MULTI- INSTANCE CLOUD	MULTITENANT CLOUD
Epicor	~	~	~	
FinancialForce				~
Infor	~	~		~
Microsoft Dynamics 365				✓
Oracle	~	~	~	✓
Oracle NetSuite				~
Sage	~		~	~
SAP	~	~	~	~
Unit4	~	~	~	
Workday				~

Source: Constellation Research

RECOMMENDATIONS

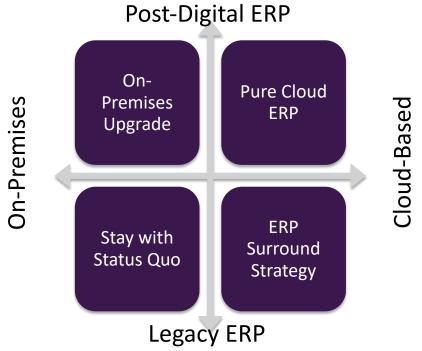
Start Optimization and Innovation with the Cloud, Then Build for AI

The road to post-digital ERP comes with many approaches. Evaluations should consider on-premises versus cloud and legacy ERP versus post-digital ERP (see Figure 5). Constellation recommends that customers do the following:

1. Surround legacy systems with cloud innovation and hybrid integration. Organizations seeking to try cloud ERP can start with adjacent cloud solutions, such as pricing, forecasting, demand planning, recruiting planning and budgeting, and talent management to get started. The goal is to understand the ease of use while accessing innovation at the edge. Teams should select integration tools that will enable hybrid models and long-term cloud-to-cloud orchestration.



Figure 5. A Post-Digital View of ERP Modernization



Source: Constellation Research

- 2. Consider a two-tier approach to cloud ERP. Start an upgrade or replacement project inside a division, geographic region or separate business unit. Take the time to redesign processes for both efficiency and automation. Apply lessons learned from the upgrade or replacement experience to drive future adoption across the enterprise.
- 3. Make the shift to pure cloud ERP. Explore the requirements to move to a pure cloud ERP solution. Map previous customizations to new or promised functionality on the road map. Consider the impact of integrations. Design the system to address key business questions. Assess processes for automation capabilities. Design for digital feedback loops.
- 4. Incorporate digital feedback loops. Use each choice to create digital feedback loops that deliver insights. Insights power next-best actions along the data-to-decision continuum. The creation of feedback loops mitigates risk, ensures compliance, optimizes operations, increases revenue, improves experience, informs product offerings and enables brand promise.



- 5. Democratize decisions in the front office and the back office. Employees throughout the enterprise can take action to improve customer experiences, but only if they have the right information presented in context at the right moment. Renew existing transactional systems from ERP, CRM and supply chain by abstracting the transactions and enabling orchestration of new experiences. Taking these new journeys to the front lines will enable the ability to democratize decisions across all stakeholders.
- **6. Deliver mass personalization at scale with automation and AI.** As organizations light up their data-driven digital networks, organizations can finally deliver mass personalization at scale. Intelligent enterprises will use AI and machine learning tools to automate this personalization and build autonomous and self-learning systems over time.



ANALYST BIO

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Founder and Principal Analyst

R "Ray" Wang is Founder, Chairman and Principal Analyst of Constellation Research, Inc., and the author of the popular enterprise software blog, "A Software Insider's Point of View." He previously was a Founding Partner and Research Analyst for enterprise strategy at *Altimeter Group*.

A background in emerging business and technology trends, enterprise apps strategy, technology selection and contract negotiations enables Wang to provide clients and readers with the bridge between business leadership and technology adoption. Wang has been recognized by the prestigious Institute of Industry Analyst Relations (IIAR) as the Analyst of the Year, and in 2009, he was recognized as one of the most important analysts for Enterprise, SMB and Software. In 2010, Wang was recognized on the ARInsights Power 100 List of Industry Analysts and named one of the top Influential Leaders in the CRM Magazine 100 Market Awards.

Wang graduated from the Johns Hopkins University with a B.A. in natural sciences and public health. His graduate training includes a master's degree from the Johns Hopkins University in health policy and management and health finance and management.



ABOUT CONSTELLATION RESEARCH

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Organizational Highlights

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- · Founders of Constellation Executive Network, a membership organization for digital leaders seeking to learn from market leaders and fast followers.



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