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Beyond ERP

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**New technology,
new options**



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Executive summary



New enterprise-grade applications are fast replacing old enterprise resource planning (ERP) systems as companies move to become more flexible and more mobile. These new applications can be integrated with traditional ERP software into “hybrid ERP” systems to enable specific functions such as human resources, supplier management, and e-commerce to operate with greater agility and independence from old-style IT organizations.

Companies looking to implement such systems, however, must look beyond the hype surrounding them, and consider them in the context of an actual business case. That should include the benefits, such as greater customer and employee engagement and faster implementation, as well as the costs, among them the shift to a subscription-based purchasing model, and the security issues involved.

The key to success with these new hybrid ERP systems is to focus on the actual business value they will generate. We expect that most companies will find that the benefits outweigh the costs.

The promise of cloud-based ERP

The brave new world of business application software is rapidly transforming how corporate IT departments source and implement all kinds of critical systems. Perhaps nowhere is this truer than in the realm of ERP systems, the software that runs virtually every large company in the world. CIOs are rethinking their approach to ERP, thanks to modular, cloud-based business applications that offer viable alternatives to the unwieldy, inflexible, and expensive systems that have long dominated the sector.

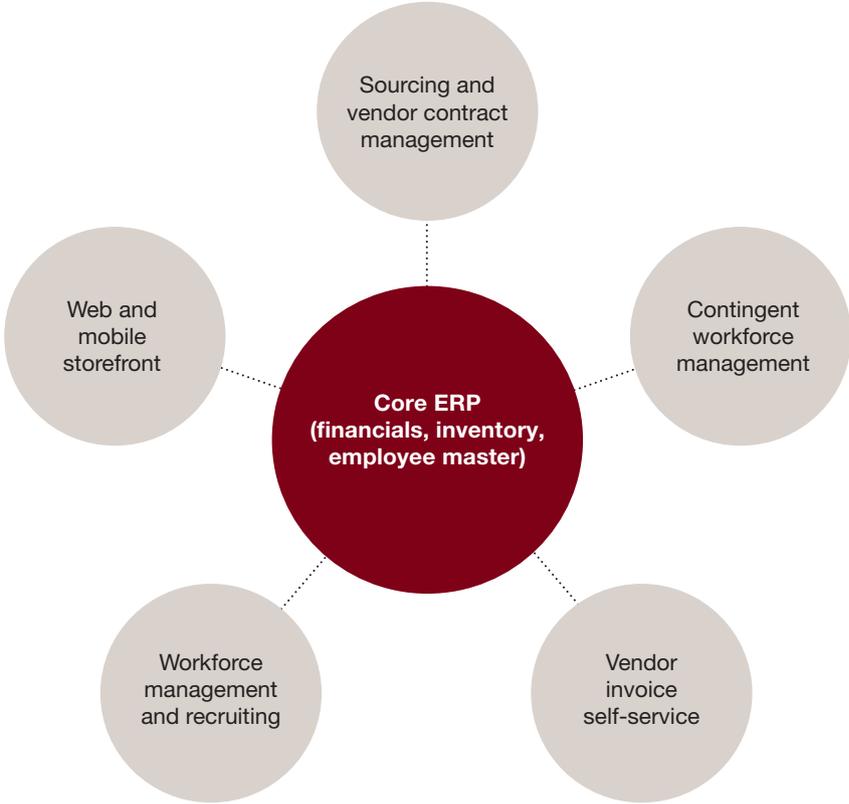
Companies like Ariba, Hybris, Salesforce.com, Taleo, Workday, and others are already having a disruptive effect on the ERP market by offering sophisticated, flexible, highly mobile, and easy-to-use applications in all manner of functional areas, including finance, procurement, supply chain, sales and marketing, and human resources. Sold on a subscription basis, these software-as-a-service (SaaS) systems offer companies the promise of reduced costs, while giving customers, suppliers, and employees alike a better user experience, greater functionality, and more control over how the systems are used. And integrating these applications into companies' legacy ERP systems — creating what has become known as “hybrid ERP” — need not be the highly complex, expensive process it was in the past. The resulting ecosystem of fit-for-purpose hybrid ERP software can be designed in a variety of combinations customized for the needs of most organizations (*see Exhibit 1, next page*).

Yet as most CIOs already know, the hype surrounding these new technologies is sky-high, and vendors are pumping millions of dollars into marketing them. Choosing the right applications and stitching together a fully functional ERP-based ecosystem requires robust integration and security capabilities that will likely push many companies to their delivery limits. So it is incumbent on companies to evaluate applications carefully in light of their actual needs, and to work up detailed business cases that take into account both pros and cons. Only by doing so will they be sure to realize the full value of these offerings.

Integrating SaaS applications into legacy ERP systems need not be complex or expensive.

Exhibit 1

Hybrid ERP takes many corporate functions out of the core ERP system



Source: Strategy& analysis

Three trends

Several developments have come together to drive the rise of hybrid ERP (see *Exhibit 2, next page*). The first is the advent of cloud computing, which is beginning to make obsolete the notion of a single enterprise-wide business system, while greatly expanding companies' ability to provide critical corporate data and functions on a mobile basis. Now, companies can knit together a loosely coupled business system consisting of fit-for-purpose, cloud-enabled applications on the perimeter, tethered to more narrowly focused legacy ERP back-office systems.

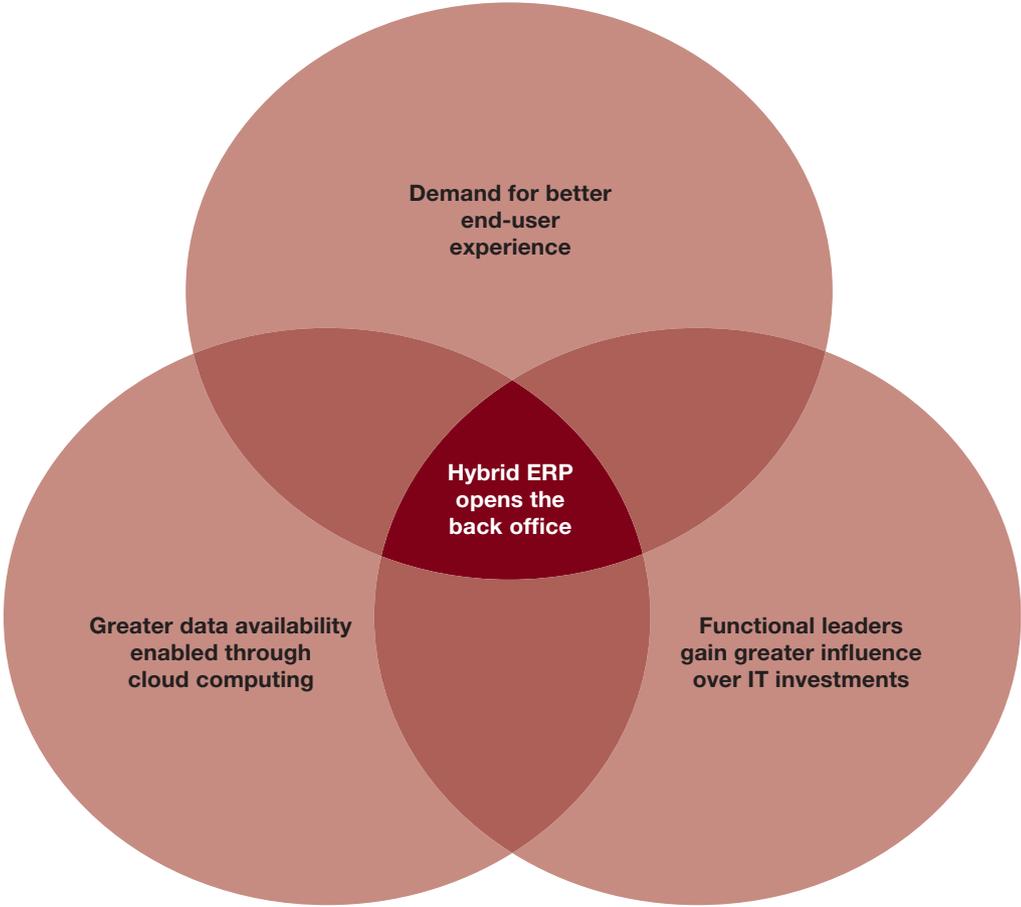
Moreover, with the functional applications based in the cloud, far-flung employees can access and use the data they need on any number of mobile devices, even wristwatches and eyewear. Indeed, this degree of data mobility has become a requirement for virtually every business process.

Second, by basing these flexible new applications in the cloud, companies can evolve away from their massive ERP infrastructure investments, which never fully delivered the end-user experiences and mobility increasingly demanded by customers, suppliers, and employees. Indeed, the shift can already be seen in the marketplace (see *"ERP revenue tilts toward the cloud," page 9*). Now, companies can build new sales channels, rapidly refine the look and feel of their Internet and mobile offerings, work more closely with suppliers to monitor and automate their supply chains, and provide employees with customizable mobile apps to support how they conduct business.

Finally, business unit and functional leaders such as chief procurement officers, chief marketing officers, chief human resources officers, and others have long demanded greater influence over the technologies that run their operations — and hybrid ERP has the potential to provide just that kind of flexibility. These applications offer significantly lower barriers to entry in terms of time and cost, allowing functional teams to pilot and implement function-specific applications — in some cases, without any help from the IT department at all.

Data mobility has become a requirement for virtually every business process.

Exhibit 2
Three trends are driving hybrid ERP



Source: Strategy& analysis

ERP revenue tilts toward the cloud

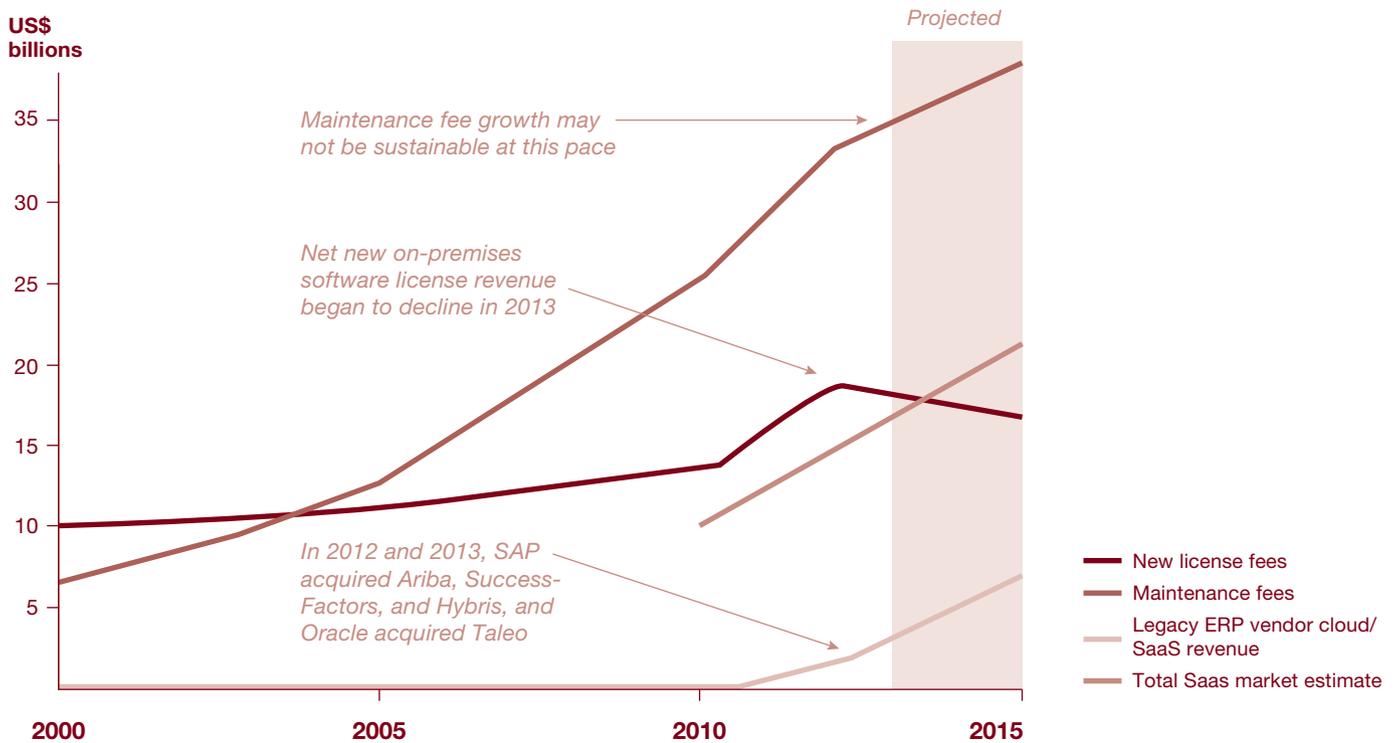
The move to hybrid ERP systems can be seen in the speed and degree of new business software investment in cloud-based SaaS applications. Net new license revenues for traditional ERP systems have been declining since 2013 to a level that has already been surpassed by total revenues from cloud-based SaaS solutions. Even the traditional ERP vendors' SaaS revenues will soon surpass their revenues from legacy ERP sales. That

will ultimately cut back on revenues from maintenance, and likely weaken their earnings as well, given the lower margins to be gained from SaaS sales (see Exhibit A).

We expect that by 2016, investment in SaaS solutions will more than double, to US\$78 billion or more, while investment in traditional ERP systems will decline by more than 30 percent, to less than \$15 billion.

Exhibit A

Total SaaS revenues have already surpassed revenues from traditional ERP systems



Source: Gartner; SEC filings; Strategy& analysis

Capturing the value of hybrid ERP

As promising as the new cloud-based hybrid ERP applications are, no company can justify investing in them without having made a strong business case for their tangible business value under real-world conditions. Such a case should take into account both the benefits of these systems and their costs, weighed carefully against those of the legacy ERP systems the company is using now. And the kinds of benefits, costs, and risks to be taken into account will likely differ depending on the industry and the market.

Benefits. Traditional ERP systems have long been criticized for their high cost, lack of flexibility, and difficulty of implementation. Hybrid ERP assemblages of modular components, on the other hand, typically cost less, allow companies to pick and choose among their various functions, and offer greater mobility. More specifically, companies can expect benefits in four key areas.

- *Customer engagement.* Companies in a variety of industries, including retail, entertainment, and media, have long maintained consumer websites, with or without order-processing capabilities, driven by traditional ERP systems. But increased competition and the need to offer great customer experiences have given birth to ERP solutions that can serve as the commercial framework for bringing greater multichannel experiences to even the smallest product lines and business units.

SaaS offerings from such vendors as Hybris allow companies to connect their legacy product and service catalogs to a state-of-the-art technology architecture. This connection creates opportunities to open new sales channels and integrate with social media for organizations that otherwise have been unable to develop and deploy such solutions. SaaS systems can also provide both companies and suppliers with better information on customer demographics, preferences, and behavior across all channels, an option not commonly associated with the traditional ERP model. When evaluating the business case for these systems, companies should strive to estimate and measure relative levels of customer

Companies can expect benefits from hybrid ERP systems in four key areas.

engagement, using metrics such as the speed of implementation of new channels and through customer surveys.

- *Procurement management.* Procurement organizations and suppliers alike have long tried to expand the functionality and flexibility of the ERP-based systems they use to communicate with and monitor their supply chains. That has now become a real possibility, thanks to new cloud-based procurement software, which significantly eases the integration of suppliers into procurement networks and makes the entire value chain of supplier solicitation, sourcing and procurement, and payables significantly more transparent than traditional systems do. Companies heavily dependent on suppliers and complex supply chains should include in their business cases metrics that measure potential increases in the efficiency of their procurement systems.
- *Employee engagement.* No company can perform well unless its employees are fully engaged and given the tools they need to get their work done. Traditional ERP solutions typically offer employees and managers little more than rudimentary self-service portals for select sets of business functions, such as time entry and expense reporting and approval. New hybrid ERP systems, however, have the potential to change all that. For example, the new cloud-based solutions for human resources from companies like Workday, Taleo, and SuccessFactors offer a consumer-like mobile user experience that allows employees to accept shift assignments, complete work appraisals, submit time sheets, and administer compensation plans.
- *Implementation speed.* Cloud-based SaaS solutions reduce deployment time and speed up the realization of value from new software. Conducting proof-of-concept trials and projects using subscription-based software and leased infrastructure is not only plausible but recommended for judging the viability of these systems — hardly an option with traditional ERP systems. These systems offer the potential for assessing economic benefit and the effect on the organization prior to committing to a particular software product, and the testing process forces vendors to be deeply engaged in ensuring that their customers capture the most value possible.

Costs and risks. Despite the many virtues of hybrid ERP, there are challenges and costs involved in moving to such systems, and these, too, must be taken into account when making the business case for the transition.

- *The SaaS delivery model.* Traditional ERP has always been purchased through a standard licensing model that required a significant up-front capital investment and, in many cases, included the first year

of software maintenance charges before the software was actually ever received, much less used. And because many companies also had to pay for the infrastructure and implementation services required to configure and load data into the software, they expended enormous amounts of time and money simply to enable basic functionality.

SaaS applications, however, are typically purchased on a subscription-based, “pay as you go” model, enabling companies to buy as much as they need. While deploying them typically costs less than half as much as with traditional systems, they aren’t free, and the subscription model will mean ongoing operating costs as well. Still, they have the virtue of allowing companies to devote the up-front capital investments that used to be required for ERP to other, more strategic purposes. Both implementation and ongoing costs must be figured into any business case developed for these systems. *Exhibit 3, next page*, provides a high-level comparison of five-year cumulative costs between traditional and hybrid ERP solutions.

- *Information security.* In spite of the advances in cloud-oriented security software and new methods adopted by vendors of hybrid ERP as part of their standard service offerings, IT departments and customers are still wary of network breaches and the loss of sensitive information — as well they should be. As a result, hybrid ERP may require a greater focus on data security policies and procedures, employee education campaigns, and aggressive assessment of vulnerabilities. These additional investments can be significant, and should also be factored into the business case.
- *Integration.* Though greater engagement with customers, suppliers, and employees is the goal for companies considering these new SaaS applications, the new software must also be integrated with the companies’ legacy back-office ERP systems — and often with the systems of their customers and suppliers. The development of a company’s application integration capability is a critical success factor to realizing the benefits of hybrid ERP. In a relatively few cases, companies may face greater challenges — and costs — in integrating multiple SaaS-based applications with their legacy ERP environments than in simply maintaining their legacy ERP environment alone.

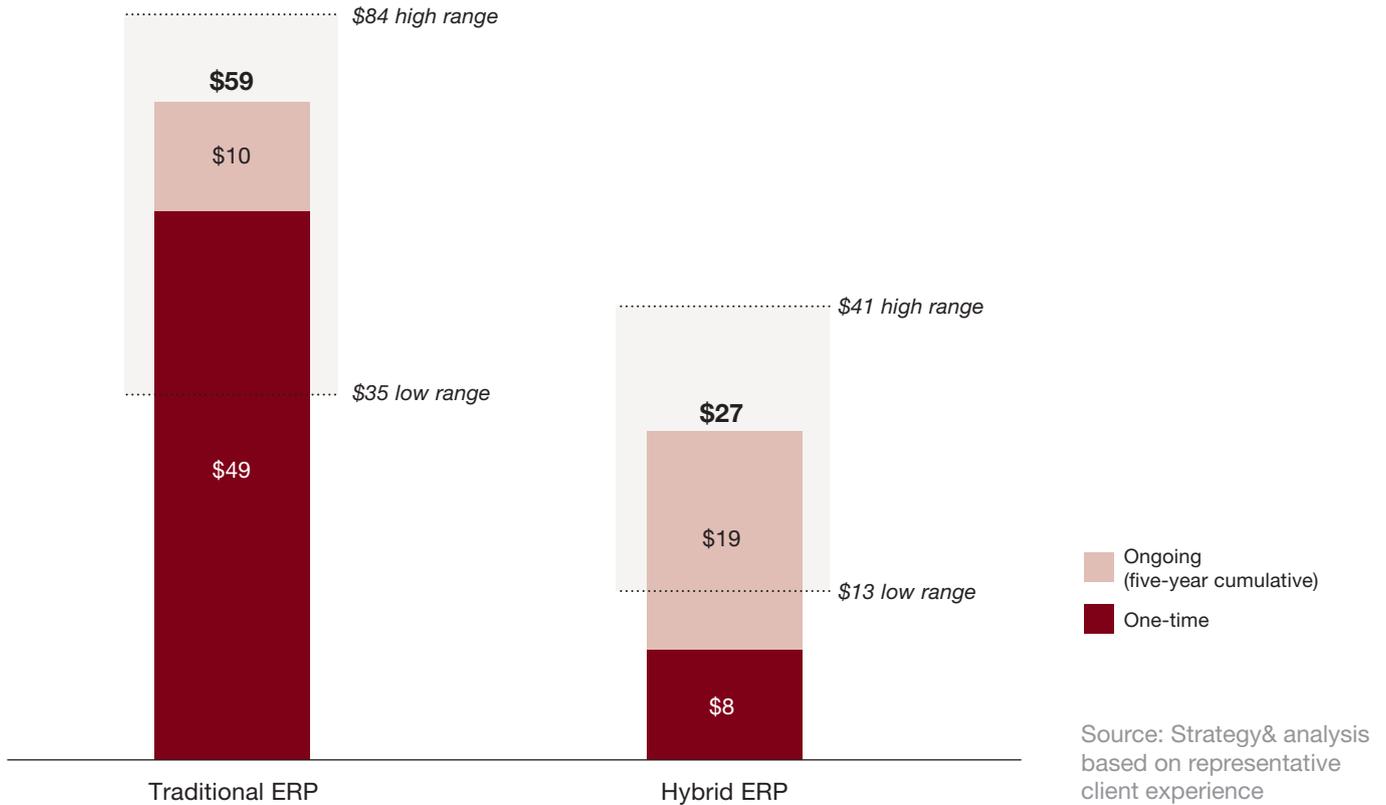
Integrating these new systems can be managed effectively in a number of ways. First of all, the integration effort needs to be run as a business and not as a project. Opportunities to generate value from the new system should be identified up front to ensure that the effort focuses on realizing the greatest revenue and earnings potential

Hybrid ERP may require a greater focus on data security policies.

Exhibit 3

Comparison of five-year cumulative costs of traditional and hybrid solutions

One-time and ongoing costs, US\$ millions



possible. The scope of the project, as well as stakeholder expectations, must be managed to lower the need for unnecessary customization. A full understanding of the complexity of integrating multiple systems, along with a realistic assessment of the amount of change an organization can absorb, will help set realistic goals for the project. Finally, it is critical to ensure that the right people are engaged and incentivized to support the transformation.

Legacy ERP vendors such as SAP, Oracle, IBM, and Microsoft already offer robust integration software as part of their traditional ERP suites. Open-source integration services available through public clouds are also maturing and can accelerate the integration process.

Industry and functional adoption

As with every new technology trend, hybrid ERP has its early adopters as well as its laggards. Industries vary in their willingness to venture into cloud-based ERP software and in the corporate functions they are ready to use it for (*see Exhibit 4, next page*). This of course depends further on the maturity of the software available; at present, cloud-based marketing and sales, procurement, and HR software is more advanced than software for functions such as R&D and production.

Exhibit 4
Adoption of SaaS applications varies by industry and function

Industry and functional adoption of modern ERP solutions

Industry	Value chain: Operations					Value chain: Functions		
	R&D	Design	Production	Marketing and Sales	Distribution	Procurement	HR	Finance
Construction				•			•	
Consumer and retail	•	•		•	•	•	•	
Financial services				•		•	•	
Healthcare		•				•	•	
High and info tech	•	•		•	•	•	•	•
Manufacturing				•			•	
Mining								
Oil and gas				•		•	•	
Professional services				•			•	•
Transportation					•	•	•	
Utilities				•		•	•	

■ High adoption
 ■ Low adoption

Source: Strategy& analysis

Conclusion

The corporate world is fast moving beyond the era of traditional ERP, driven by the need to engage more closely with customers, suppliers, and employees alike, and by a desire on the part of companies to leverage that engagement to differentiate themselves from their slower-moving competition. Linking new cloud-based functional applications to their legacy ERP systems offers companies the best of all worlds — but that doesn't mean they should jump in blindly. As with every major IT transformation, companies must create a full business case in which they carefully weigh the pros and cons of these new systems, and then continue to measure the post-implementation results, if they are to realize the true business value of these programs.

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