Two-Tier ERP: Enabling the Future-Ready Global Enterprise with Better Innovation, Customer Experience and Agility

Organizations that embrace two-tier ERP strategies are better positioned to both navigate volatile global business conditions and acquire or divest operations that generate operational efficiency and growth.

Executive Summary

To achieve their goals of global efficiency, cost reduction and regulatory compliance, forward-thinking enterprises are pursuing uniform, consistent processes and shared services. At the same time, they cannot afford to compromise the flexibility, agility or speed they need to respond to today’s ever-changing and unpredictable business environment.

To meet these seemingly conflicting needs, a growing number of companies are migrating from a single-instance ERP system to a two-tier strategy that combines the stability of on-premise ERP with the agility of cloud ERP (i.e., multi-tenant ERP delivered in a SaaS model) to create a hybrid environment. On-premise ERP systems function as “systems of record,” or “a single source of the truth” for corporate data, while cloud ERP systems act as “systems of engagement,” which are more interaction-focused and geared toward serving customers, employees and partners.

For example, nearly half the respondents cited in a February 2011 report from Constellation Research were considering a two-tier ERP strategy, a 27-point increase from 2009. Among the drivers were the high operating costs of existing systems, a lack of industry-specific ERP functionality, excessive upgrade costs and too little innovation from existing ERP vendors. Saugatuck Technology’s 2012 Cloud Business Solution Survey, meanwhile, predicts that through 2016, “hybrid” cloud deployments, such as two-tier ERP, will become the enterprise platform of choice, with at least three-quarters of new enterprise IT spending involving hybrid or cloud platforms.

A two-tier ERP approach can provide the ideal combination of global processes, lower costs, flexible deployment, agile customization and ease of use. Such an approach is useful, for example, for quickly providing ERP capabilities to a newly acquired or growing business, a spin-off or the entire enterprise during an ERP transition. This fulfills the needs of enterprises that must protect existing ERP investments while obtaining significant new value via cloud ERP extensions.

Business Drivers

ERP systems have formed the information backbone for many organizations since the mid-to late-1990s, when they were deployed to cope with issues such as the Y2K transition, increased
regulation and the adoption of the euro. Since then, however, rapidly changing business and technology landscapes have highlighted the flexibility limitations of on-premise ERP.

Over time, organizations realized that big-bang implementations of ERP systems are sometimes ineffective. This is especially true when they need to customize ERP instances for local needs, which increases the cost of routine operations, upgrades and maintenance. These added costs are a greater burden today, as the economic downturn has forced organizations to do more with less, pushing them to improve and optimize existing on-premise systems. As a result, organizations find the two-tier ERP approach to be a compelling strategy to meet their requirements.

Modern enterprises must swiftly capitalize on opportunities in emerging markets to stay competitive, introducing new products or services either internally or by acquiring other companies. Either approach requires a rollout of new processing capabilities and seamlessly integrating them with corporate ERP systems. Deploying a complex, large-scale ERP solution would not only be more expensive than necessary, but it would also overwhelm the skills and infrastructure of the local business unit, which needs ready-to-deploy, simple and flexible systems that are also robust, cost-effective and able to deliver the same results as on-premise ERP systems.

As global enterprises expand through mergers and acquisitions, they face the daunting task of consolidating and supporting disparate ERP or homegrown systems across business units in different geographies. With today’s relentless pressure to slash costs and meet ever-changing business challenges, no organization can afford years of merging, cleansing and synchronizing data among multiple on-premise ERP systems or configuring each instance to local needs. When organizations are unable to consolidate to a single ERP system, a two-tier ERP solution can be a cost-effective, agile solution.

The Role of Two-Tier ERP

Single-instance ERP systems are overly expensive and take too long to deploy to keep pace with changing business models, competitive pressures, regulatory needs and global customer demands. As single-instance on-premise ERP systems age, managing and tracking required changes poses significant challenges to business and IT operations. Unmanaged change requires the IT team to create quick-fix patches and/or deploy point solutions to plug potential gaps. All this adds to the very chaos that organizations seek to avoid by adopting ERP. Even after deploying the

Changing Axis of Innovation Leads To New-Age ERP

![Figure 1](image-url)
on-premise ERP system, the core IT team is so busy mending and tweaking that they have little or no bandwidth to roll out the system to new subsidiaries, divisions or processes.

A two-tier ERP approach helps organizations swiftly deploy and integrate new processing capabilities at subsidiaries or smaller business units that can be seamlessly integrated into the core on-premise ERP backbone. This approach significantly reduces the time and cost required to implement, support and maintain ERP capabilities.

Two-tier ERP does not replace on-premise ERP but instead complements it with more agile, flexible and lower-cost cloud-based ERP. On-premise ERP still provides the standardization and consistency for back-office systems of record for processes such as make-to-deliver and record-to-report that are vital for efficient operations, regulatory and legal compliance, and consistent quality (see Figure 1).

In short, embracing cloud ERP while maintaining existing on-premise enterprise applications can help organizations do the following:

• Penetrate new markets and geographies, while retaining business agility and flexibility, as well as lower total cost of ownership and adopt standard processes.
• Quickly link newly acquired businesses into – or separate divested business from – existing ERP systems.
• Increase focus on core business processes by keeping them on-premise while enabling market-facing processes via cloud ERP.
• Shift spend over time from Cap-Ex to Op-Ex.

Cloud ERP: Best Option for Two-Tier ERP
Today’s ERP must improve an IT organization’s alignment with the business rather than force the business to fit its processes into a portfolio of applications. IT organizations need to innovate and implement flexible systems to support and automate new processing capabilities for business agility. Such systems should facilitate global visibility, process efficiency and standardization.

Even as businesses face these new and urgent challenges, innovative technologies have created new ERP delivery channels that help meet those needs. Since ERP systems were first deployed, organizations have increasingly turned to virtualization. This entails a services approach to IT delivery and the use of cloud-based systems to reduce costs and quickly add new capabilities, while giving users personalized content and consumer-like ease of use.

Cloud ERP uses this new computing paradigm to provide almost all the capabilities of on-premise ERP systems, but in a consumption-based model that is considerably less expensive, easier and faster to deploy (and downsize) than on-premise ERP. Cloud ERP eliminates upfront Cap-Ex costs and drives better user adoption and value with easier-to-use interfaces.

By enabling easier collaboration and information access, cloud ERP facilitates the rapid piloting of ideas, easily scalable solutions and faster, lower-cost expansion into new markets. It also provides customer service via digital channels and makes it easy and less expensive to support local language, tax code, currency or regulatory requirements.

Cloud ERP provides differentiated front-office “systems of engagement” for functions such as “procure to pay” or “hire to retire.” This creates value by providing superior user experiences and delivering customized information or process flows that support local business needs in areas such as sales, marketing or customer service.

How Two-Tier ERP Helps the Bottom Line
A two-tier ERP strategy can help companies overcome key technology challenges, such as:

• Application modernization (i.e., end-of-life ERP migration): Enterprises considering an application modernization strategy can use two-tier ERP to continue operating efficiently while adapting to rapidly changing business needs.
• Application rationalization: Organizations can deploy on-premise ERP to support core corporate functions while deploying cloud ERP for market-facing functionalities.
• New application requirements: Cloud ERP can complement on-premise ERP with next-generation disruptive technologies, such as Web services and process integration libraries, to enable applications that operate anytime, anywhere.
• Cost reduction: Cloud ERP shifts responsibility from the customer to the vendor for upgrades, patches and other functions. Cloud ERP also reduces total cost of ownership by eliminating the need to purchase servers, storage and network capability for on-premise systems.
Corporate strategies, as well as organization and operating models, all play a role in determining when, and how, to adopt a two-tier ERP model.

Constellation Research cites a large Japanese manufacturer that experienced improved capabilities for localization and handling of multiple currencies and languages using cloud ERP applications, at half the cost of on-premise solutions. “Going to country-specific deployments resulted in faster deployment times, quicker updates to regulatory and legislative changes and 17% reduced IT help desk costs,” says the Brazil country manager of a Japanese entertainment subsidiary.3

Driving Two-Tier ERP

In our work with clients worldwide, we have found the best ERP standardization model is not necessarily the least complex or even the one with the lowest total cost. The best model, rather, is the one that fits an organization’s specific structure and the critical market challenges it faces.

We have developed a three-dimensional approach that focuses on platforms, people and processes to meet the needs of companies in nearly every industry (see Figure 2). The approach also enables organizations to deliver functions and services required by employees and business partners. We deliver these ERP solutions by leveraging our cloud applications portfolio and our define-deliver-innovate (DDI) methodology.

In the “defining” stage, we help organizations understand what constitutes the cloud solution that best meets their specific requirements. Additionally, we assess the readiness of the organization’s systems, people and processes. In the “delivering” stage, our application development and delivery professionals use best-in-class technologies to help them compete in their markets, and to achieve effective synchronization of master data and maintenance of financial and operational control at a group level. After successful delivery, our line-of-business experts continue to innovate and help our clients achieve measurable gains in speed, quality and efficiency, with the help of our experienced cloud business process consultants.

Getting Started

Since the best two-tier ERP strategy is geared toward the needs of a specific business, companies should begin by evaluating:

- Where their existing ERP implementations are succeeding – as well as failing – to help capture market share, revenue and margins.
- Which of the functions provided by existing ERP systems are systems of record (or core ERP) vs. systems of engagement (or cloud ERP).
- Which of their local business units have custom requirements that are too difficult or expensive to meet with the core ERP system and might be better served by cloud ERP.

Two-Tier ERP: A Representative Approach

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Figure 2
• Whether cloud ERP is the right fit for a small off-site division or a remote manufacturing unit without the budget and skills required to support a traditional ERP deployment.

• Whether cloud ERP is a cost-effective route for adding enterprise systems capabilities for a business unit slated to be spun off or newly acquired or whether it is a temporary solution amid an upgrade of a core system.

Answering questions like these is the first step toward deciding whether a two-tier ERP can help an organization meet its business needs through a hybrid on-premise and cloud ERP combination. A detailed analysis should follow, which should include interviews with key stakeholders, an evaluation of the cost of various cloud ERP options and criteria to assess the move-forward ERP selection process.

Footnotes


About the Author

Munish Gupta is Cognizant’s Global Markets Leader for the Cloud Solution business. He has over 19 years of cross-industry experience selling and delivering global business transformation programs using leading on-premise and cloud enterprise application packages. Munish has assisted Fortune 500 senior C-level clients in improving business operations, revenue growth and cost optimization through innovative enterprise architecture models, including the hybrid cloud ERP strategy and enablement across process value chains. He can be reached at Munish.Gupta@cognizant.com.
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