Technology leaders are well versed in the benefits virtualization brings to IT infrastructures. By enabling IT to consolidate and harmonize their infrastructures, virtualization helps not only lower the total cost of ownership, but also allows IT to adapt to the changing needs of the business by delivering systems with the right features at the right time.

When it comes to enterprise resource planning (ERP) landscapes, virtualization is particularly important. Virtualizing these applications can increase a project’s return on investment by maximizing hardware utilization. It can decrease the data-center footprint and reduce energy consumption, contributing to even more cost savings. What’s more, hypervisor software enables mobility, availability, disaster recovery and more efficient allocation of IT resources. According to a survey conducted by the Aberdeen Group, the top benefits of virtualized ERP deployments include better disaster recovery functionality, the ability to dynamically manage capacity, server consolidation and application mobility.

While these benefits can significantly improve IT operations, they are also important to business users of enterprise applications. Technology leaders should be prepared for ERP virtualization discussions not only with their staff, but also with business users who rely heavily on ERP. IT and business must work together around ERP, since these applications dictate how business processes and operations are implemented. Changes to these applications, even in the background, must be explained in terms of benefits to the business.
Virtualization helps not only lower the total cost of ownership, but also allows IT to adapt to the changing needs of the business by delivering systems with the right features at the right time.

Business users are often reluctant to change around ERP applications, even if it means an improvement, because they are so integral to how business users get their jobs done. Making the transition to virtualized ERP software can affect business (at least with downtime during migration), so CIOs should stress to concerned users that the transition will mean the same functionality with better performance and flexibility. Furthermore, virtualization offers the chance to increase availability of the solution at lower cost than traditional architectures. And virtualizing business applications helps avoid vendor lock-in at the hardware level. Later changes—even insourcing or outsourcing—are much easier with a hardware-agnostic setup.

CIOs should be prepared to talk with business users in concrete terms about the benefits of virtualizing ERP applications in a well-managed, coordinated manner, when the project has buy-in from both sides of the organization. Gaining consensus on the benefits of virtualization and how the move could improve business forms a partnership between IT and departments that will help CIOs sell the virtualization project to the C-suite.

**Business Benefits**

Luckily, describing the business benefits of virtualizing ERP applications doesn’t require an advanced degree in business administration, but can be done in simple terms. By understanding the goals of business users and explaining the benefits of virtualization, technology leaders increase their odds of getting these employees on board. According to the Aberdeen Group survey, business leaders believe the following benefits are the top reasons to move to virtualization and private cloud environments:

- **FASTER TIME TO VALUE:** Virtualization can provide much faster new systems and landscapes based on templates or automation which are ideal for development and testing projects. Development cycles can dramatically shortened.

- **REDUCING IT COSTS:** Reduced upfront hardware expenses and lower ongoing maintenance and management costs means business units can free up resources to be used elsewhere.

- **IMPROVED AVAILABILITY:** High availability and disaster recovery can be implemented much easier at lower cost, which gives users more continuous access to the systems—and a smoother recovery in terms of disaster.

**Virtualization as a Best Practice**

Many technology leaders have discovered the benefits virtualization brings to IT infrastructures and have made the transition to virtualized environments a best practice.

“Virtualization was something that, as a best practice, we introduced to our organization as a way to reduce costs and simplify management,” says the regional IT director of a large electronics company. “Within the last three years we have begun to look at virtualization as a staple in what we do. If anyone asks for a new application now, the first checkpoint we have is whether or not the application can be virtualized.”

During the past ten years, virtualization technology has evolved so that effective support of large workloads is possible. Having virtualized other components of IT infrastructures, enterprises can bring the benefits of virtualization to their ERP software landscapes. Turning this trend into a best practice means:
Within the last three years we have begun to look at virtualization as a staple in what we do. If anyone asks for a new application now, the first checkpoint we have is whether or not the application can be virtualized.

Regional director of IT at a large electronics company

Conducting high-level planning and assessment of IT environments
Building, configuring, testing and deploying according to business strategies and goals
Optimizing deployments by leveraging industry resources and expertise
Considering virtualization for all new projects going forward

“In general I would say that virtualization should be viewed as a best practice—every customer should evaluate using virtualization in their landscapes,” says Maik Schmalstich, global head of virtualization and cloud management services with SAP. “In the development and quality assurance stages of ERP implementation, major savings can be realized from virtualization in terms of high consolidation rates. On the production side, the average utilization of systems is higher and there are bigger demands in terms of performance, which virtualization can help support.”

**Leveraging Expertise**

Despite the clear advantage of making ERP virtualization a best practice, technology leaders still run into a number of challenges when attempting to make the transition. IT departments often find there’s a lack of clear information on infrastructure utilization for existing applications. There can be complexity and risk in migrating from a physical to a virtual infrastructure, which is magnified by a lack of expertise for planning, executing and managing virtualized ERP.

Turning to professional services to help virtualize ERP applications makes sense, especially for risk-averse companies that consider ERP implementations mission-critical, according to the Aberdeen Group survey. Professionals with expertise virtualizing ERP applications not only have the skill sets to augment available talent, but also have the experience and capacity to ensure the project is a success. Professional service organizations can help in the following areas:

- **ASSESSMENT:** To determine existing limitations and goals, and identify strategies and roadmaps. During this phase, technology leaders can examine trade-offs and determine the effort needed to migrate from the current state to a virtualized platform. They can also examine implementation options and determine the most cost-effective way to virtualize.

- **DESIGN:** To help manage migration so technical risk is minimized and system downtime is limited. This phase includes testing, prototyping and migration strategy development.

- **IMPLEMENTATION:** In conjunction with professional services, applying best practices to build, configure and test the virtualized architecture. During this phase the health of the preproduction solution is checked and software is leveraged for executing strategy.

- **RUNNING AND OPTIMIZING THE SOLUTION:** Once virtualized ERP applications are operational, ways to boost performance are explored and cloud computing options can be considered. Solutions that offer automation and holistic management are necessary to realize the efficiency and management benefits of private clouds.

With the support of professional services, buy-in from business users and clear goals, CIOs can approach ERP virtualization projects with confidence. Once the transition to a virtualized ERP software landscape is complete, both the business and IT will reap the benefits.

1 The Case for Virtualizing Your SAP Deployment. December 2010. Aberdeen Group