

Small, Yet Mighty

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You don't have to be big to get ERP right

Industry analysts say the enterprise resources planning (ERP) market for small and midsize businesses is booming—they are not surprised that the “seven year itch” has come around again. Many companies tend to replace their ERP systems every seven years or so, and the last cycle was during the buildup to the new millennium.

Perhaps more surprising is that a recent AMR Research survey of small and midsize businesses reported 31 percent

of respondents will evaluate an ERP application for the first time in 2007.

It is understandable these business leaders are rushing to implement ERP—current systems are mature and sophisticated, with solid functionality at an affordable price. This functionality is extended with powerful Web capabilities, reporting and analysis tools, and responsive user interfaces. Implementation methodologies are well defined and tested,

and the larger ERP players have invested heavily in adapting their approach to the small and midsize business market. In today's competitive environment focused on speed, agility and productivity, it's hard to imagine a company's leaders would choose to hold on to their fragmented legacy systems. That's the good news.

What's the bad news? Because it can radically change practically every process—not to mention touch every employee, supplier, and customer—the implementation of an ERP system still is one of the most risky and potentially disruptive activities a company will ever undertake. This massive change management effort is like changing all four tires on the car while traveling down the highway at 60 miles per hour with your family inside.

What's more, while small and midsize business leaders face many of the same competitive pressures and complex software needs of their colleagues in larger companies, they usually lack the corresponding budget, internal staff, and technical and project management skills. In fact, the proportional investment required to implement an ERP system is far greater for smaller companies. Therefore, it is important for decision makers to learn everything they can before embarking on an ERP project.

Where's the value?

When properly implemented, an ERP system can efficiently process the financial and operational transactions of an entire company, providing a single, integrated, and valid source of structured data for managing; controlling; reporting; analyzing; and, most importantly, continuously improving business performance. The drivers for ERP investment today are far-reaching. They include the following:

- **Continuous improvement:** An ERP system provides the tools to support the plan-do-check-act cycle. "Check" is accomplished by providing feedback through reporting, analysis, visualization, and event-based alerts. "Act" occurs through the standardization, documentation, and error-proofing of each newly improved business process.
- **Global dimension:** In a world of global commerce, supply chains span cultures, languages, legal and regulatory environments, currencies, and time zones. Real-time visibility of distributed operations and consistently applied standardized processes (best practices) are essential.
- **Cost containment:** Waste results from business processes that must jump across the boundaries of fragmented information systems. Once processes are improved and consolidated into a single information system that supports efficient workflow, people waste less time reconciling conflicting data and chasing annoying gaps

and exceptions. As a result, there is more time for innovation and delivering value to the customer.

- **Lean performance:** When properly implemented, an ERP system supports the smooth and uninterrupted flow of information to enable value creation. In recent years, several ERP vendors have introduced powerful lean capabilities in their planning, scheduling, and execution systems. As lean practices extend beyond production to the office environment, the ERP system proves to be a valuable tool in streamlining business processes and automating the "paperwork factory." When combining ERP and lean, it is important to have a light touch to avoid over-automation. With each step, users should be asking whether the system adds value or waste.

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ERP trends

The ERP marketplace has experienced many shifts in the past few years, and these changes mostly are positive. However, decision makers at small and midsize businesses should consider four major aspects of ERP—consolidation, sophistication,

integration, and service delivery maturity.

First, consolidation has played a major role in the ERP industry. Just a few years ago, there were hundreds of ERP candidates for a selection team to consider. Post-2000 ERP market consolidation has reduced the number of candidates to dozens, yet those left standing likely are long-term contenders.

As far as the tier 1 players, SAP and Oracle both have invested heavily in adapting their products and services, and they bring astonishing capability and complexity within reach of midsize companies. Both have developed offerings that are a combination of preconfigured products for vertical markets and quick-start consulting services—Oracle's Accelerators and SAP's All-in-One. Don't be fooled. The trade-off for access to such a massive library of software capabilities is a relatively higher cost for both initial investment and ongoing maintenance.

There are non-tier 1 vendors that do a fine job serving the small and midsize business market, including Epicor, IFS, Infor, Lawson, Microsoft, QAD, and Sage. Several of these vendors have grown through acquisition and the blending of multiple products. This strategy applies ongoing maintenance revenues to the development of new products, such as customer relationship management (CRM) and product life cycle management (PLM). These types of products integrate with the entire family of ERP modules, including accounting, order entry, planning, purchasing, and inventory management.

On the positive side, these companies offer a portfolio of ERP solutions and are eager to match the right one to

a company's needs. On the negative side, their research and development and customer service resources can be stretched thin managing a complex multiproduct family. These new components initially may lack the maturity and functionality expected by the customer, hence leading to the "bleeding edge" syndrome.

Next, ERP systems are increasingly sophisticated, evolving from massive, monolithic applications into a comprehensive framework of components that can be mixed and matched in endless combinations. The maturation of industry specific solutions adds to the enormous library of software available. Only an experienced consulting partner can help decision makers at small and midsize firms navigate their way through this maze of possibilities to develop practical solutions.

Furthermore, ERP now is seen as just the first step, the foundation upon which to build additional capabilities such as CRM, PLM, business intelligence, supply chain management, and other complementary enterprise systems. The complexity created when integrating multiple systems can be daunting for large and small companies.

Even though the features of these additional enterprise systems can be alluring to the decision makers at small and midsize businesses, ERP is the foundation upon which they all rely. Therefore, that is where the implementation usually begins. For example, ERP contains customer records and transactions that are extended in CRM, and the product development process that is supported by PLM uses inventory and bills of material (BOMs) stored in the ERP database. It is essential to establish good ERP record accuracy discipline in inventory and BOMs before moving to a sophisticated warehouse management or advanced planning and scheduling system.

For small and midsize businesses implementing ERP for the first time, the best approach to these additional enterprise systems is a cautious one. Too many ERP projects fail by trying to do too much, too soon. Implementers should begin with the core of essential capabilities needed to run the business and implement additional functions through rapid, successive phases, once the core framework is stabilized. This often means loosely integrating fragments of the old system with the new ERP software in the early phases. Because integration projects are expensive, and the tools often can't interact with older legacy systems, this integration usually is performed manually—a strong incentive to move to the next phase as quickly as possible.

Next, integration is the goal of an ERP system. It should work with complementary information systems, as well as lingering fragments of legacy systems and databases. Because it is the foundation upon which all business-process-oriented systems must be built, the ERP frame-

work has become what Gartner Group now calls a software "ecosystem." This implies that massive ERP products will continue to be componentized into smaller bits, working to adapt to specific business needs without a massive reprogramming or maintenance effort.

This requires a shift in the approach to enterprise integration, which has been underway for several years now. In the past, integration has been the work of careful handcrafting, stitching complex applications together into a fragile quilt of interrelated processes and data using nonstandard tools.

But with the advent of service-oriented architecture (SOA), applications are being designed to plug into each other as standardized components.

Small and midsize businesses often have the same integration challenges as larger companies, with a host of legacy applications, databases, and spreadsheets creating data anarchy and waste across business processes.

This is especially true for businesses moving to ERP for the first time. Even with the evolution of new tools, enterprise integration projects can lead a company into treacherous and unexplored waters. Decision makers should consider the following precautions:

- Don't fall for something that its vendors promise will be the latest .NET, Web services, or SOA technology. Nothing about integration is easy because it involves the interaction of dynamic business processes and complex technologies.
- Leaders at small and midsize businesses suddenly may need to move ahead with a supply chain or e-commerce integration project if a large trading partner encourages them. In that case, they should leverage whatever knowledge, tools, and assistance the trading partner provides. This enables leaders to control the project scope carefully, prototyping each phase as they go to prove the feasibility and benefits.
- Lean organizations should approach enterprise integration projects from a holistic perspective. Team members should simplify the value stream first by removing unnecessary tasks and transactions, eliminating waste, and redefining processes.

Steps for success

The key to sustainable ERP success is to break the seven year replacement cycle, which starts with these six steps.

1. Build the company's bench strength. Leaders should choose the ERP team from the best and brightest the company has to offer. After all, these are the architects of future business processes. The team must be given sufficient time to organize, learn, and execute.

2. Develop a governance process. An oversight body (often called the ERP steering team or project management office) must monitor the project closely, ensuring that scarce

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resources and competing priorities are managed properly. Members of this body often oversee a portfolio of company-wide projects. This can be vitally important to the success of the ERP project because it will be competing with other projects for time, attention, and resources.

3. Control scope. Decision makers must implement the essential foundation in phase one and follow with a succession of miniphases to incrementally add capabilities. A formal change management process ensures changes to project scope (and the impact on budget and schedule) are known, evaluated, and authorized.


4. Test, test, test. Data quality should be emphasized, simulating a realistic workload and transaction processing environment. Going live is a relatively low-risk event if proper tests have been conducted.

5. Involve the user community. Employees outside of the core ERP team should be tapped to validate current and future processes and functional requirements. Training should happen shortly before going live to avoid the need for refresher training. Strong communications presenting a transparent ERP project will foster user acceptance and support.

6. Continuously improve. Definitions of ideal future-state business processes should become the “blueprint” for selection and implementation of software. From this perspective, the ERP project is a natural extension of the

continuous improvement process. In fact, once improved processes are identified, team members may find a new ERP system isn't necessary.

Leaders will occasionally be inclined to skip the future state and gap definition step for time, resource, or budgetary reasons. Instead, they may choose to follow the ERP system's “best practices.” Using these predefined best practices often is a good idea because they are derived from years of experience. However, there will be cases when a company's future state processes are different from the out-of-the-box ERP best practices.

Basing an ERP project on a foundation of continuous improvement is the single most important step to a highly successful implementation. When members of the ERP team become an integral part of continuous improvement, the ERP system reinforces effective change management and becomes an adaptable, sustainable solution. Remember, ERP automates and standardizes current business processes, but continuous improvement makes them better. 

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