



## Is It Time for a New ERP System? Five Drivers of Change



# Introduction

No matter what business or industry you are in, at some point someone will ask, "Is it time to change our ERP, or should we continue with our current system?" This is not an easy question to answer. If you decide to keep your current system you risk falling behind technologically and functionally. On the other hand, if you decide to change your ERP, you will be faced with making a large investment, undergo varying degrees of disruption to you organization, and risk a failed implementation.

What is the right answer for your company? Over the past 15 years, SoftResources has helped hundreds of organizations traverse the software selection process. Each company's evaluation process led it through examinations of its own unique problems. Each had different reasons for staying on their current system or for making a change. In many cases their decision boiled down to five drivers of change.

## Five Drivers of Change

**Business Processes.** Business processes driven by older, inflexible ERP systems become constrictive.

**Systems Technology.** Technology becomes outdated, making integration difficult and causing a loss of strategic technological advantages.

**Software Vendor.** Changes with the software vendor such as acquisitions or mergers directly impact the capabilities of the software and its future direction.

**Reporting.** Older systems are often full of information that cannot be accessed without significant time, energy, and effort.

**Total Cost of Ownership.** The total cost of ownership of the current system justifies the cost of purchasing a new ERP system.

If your company has found challenges with many of these areas, you should consider selecting and implementing a new ERP system.

## Business Processes

We recently asked the CEO of a large multinational organization why they were changing their ERP system. "To improve our business processes," he replied, stating one of the most widespread drivers companies have to change their ERP systems. As you evaluate your ERP system with regard to business processes you should first assess the level to which any bad business processes are forced on you by your ERP system; and then identify the number of sidebar systems users have created to work around your ERP. If you find significant process issues in these areas, a change to a modern ERP system may be beneficial to your organization.

## Bad Processes Forced by ERP System

The functionality and capabilities inherent in your ERP software have a big impact on your business processes. As you assess the effectiveness of your current system, you must first review your core business processes to determine if they enable maximum efficiency and productivity. If they do not, investigate whether the software system imposes constraints on your processes. Are your users saying "I do this because that's the way the system makes me do it"?

When ERP systems were introduced 20 years ago, they were rigid in their functionality. They forced companies to conform business processes to the dictates of the software, or required them to significantly customize the software to meet their specific requirements. However, business processes evolve over time while the software remains static. This causes a disparity between the way the software was originally implemented and the new requirements of the business. This evolution continues until you get to the point that the processes in the system actually constrict the ability of users to efficiently run your business. In common with the CEO mentioned above, this is a major reason why your company might end up implementing a new ERP system.

New enterprise software applications offer flexible business processes based on best practices and process tools such as workflow. Workflow is the ability to set up and change process flows within the system. It includes many capabilities such as electronic routing of documents, event notification, and automated processes based on triggers. Many ERP vendors offer flexible rules-based workflows that allow businesses to create custom processes based on their operations. These workflows can be changed as their preferences and requirements evolve. In some of the more sophisticated systems, power users are even able to diagram and implement new workflows with drag-and-drop technology. Such flexibility allows the ERP system to evolve with changes in business processes and practices in your company and industry.

## Creation of Sidebar Systems

When users feel that inefficiencies in the ERP system have become too burdensome, they find other ways to get their jobs done. It is only human nature that individuals take it upon themselves—even when not authorized—to find workarounds through sidebar systems that improve their personal productivity. Such sidebar systems are typically created using outside tools such as spreadsheets and databases. These systems give workers control of data but also form isolated islands of data. The result is redundant systems, duplicate data entry, and the need to reconcile the systems to mitigate the increased possibility of errors.

In some cases, management is not even aware sidebar systems exist. As you analyze the efficiency of your current system, you need to identify what work is being done outside your ERP system. The more spreadsheets and databases you find, the better a candidate you are for a new system.

A new software implementation can bring many benefits to organizations that have many of these sidebar systems. First, a modern ERP system enables all key data and information to be input into one central database allowing for ease of reporting, and minimizing the chance for errors. Next, engaging in the selection process allows the organization to come together as a whole. Users are empowered when they have participated in the requirements definition discussions. They take ownership of the implementation because they have contributed to the decision. Finally, a new implementation gives you a fresh look at your business processes. As you plan your implementation there should be a balance between changing established processes in order to take advantage of the inherent capabilities of the software versus software modifications to fit key functionality required by your organization.

## Business Process Key Considerations

As you assess the effect of your current ERP software on your business processes, you should consider the following questions:

- Do your current business processes decrease efficiency and productivity?
- Are they in place to make up for inefficiencies in the ERP system?
- Have they been dictated by the system because of lack of functionality?
- Have your business requirements changed over the years making the reasons you selected your current system no longer valid?
- Have users created many sidebar and workaround systems outside the ERP?

Implementation of a flexible ERP system allows your company to take advantage of new capabilities, functionality, and fresh ideas. An implementation partner that understands your industry is an excellent resource for efficiently implementing the system and effectively setting up your business processes. Selection and implementation of a modern ERP system can reduce manual processes, eliminate redundancy, and reduce paper documentation giving your company the opportunity to:

- Review all business processes in place and determine which are required, which can be modified, and which can be eliminated.
- Identify and eliminate redundancy and manual data entry.
- Standardize business processes across all departments.
- Adopt the best practices available in new software to obtain greater efficiency over the current ways of doing business.
- Make use of flexible workflow functionality to take advantage of automated business processes, document routing, events, and alerts.

# System Technology

Software technology changes quickly. A great example of this is that in a matter of only a few years, user interface technology has progressed from the green screens of the 1980s, to Windows point-and-click graphical user interfaces of the '90s, to the Web browser look and feel of today complete with hyperlinks and full text search bar. This means you need a software system that keeps pace with new technology to enable you to remain competitive. As you assess the technology of your ERP system, the key drivers of change are integration, availability of support and resources, and customization.

## Integration

Many companies on older ERP systems have multiple ancillary software systems that handle various aspects of their business because they have either enabled departmental autonomy for their systems, or they have requirements that the core ERP software vendor was unable to provide at the time they bought their systems. The data from these systems must be passed to and from the central financial or ERP system. Companies that lack comprehensive systems integration have difficulty managing data in multiple locations, have additional costs to upgrade software from multiple vendors, and have to employ IT personnel that are focused on maintaining integrations between systems.

In recent years, modern ERP systems have tried to solve these integration problems by expanding their functional capability. The goal is to be a "one-stop-shop" of integrated functionality to replace disparate standalone systems. To further extend functionality, ISVs (independent software vendors) offer industry-specific add-ons that are tightly integrated to the core ERP application. For those organizations that still require third-party applications, ERP vendors offer APIs (application program interfaces), which are strong integration tools that facilitate integration.

## Availability of Support and Resources

As you evaluate the technology of the software you are using, you need to consider the resources that will be available to support you for the next seven to twelve years. Your current IT personnel have invested time gaining expertise in the technology of your current systems. Some will embrace a change to newer technologies. For others a change in technology may be extremely difficult. In fact, we have seen employees leave organizations because of a technology change. You will need to know the culture of your IT personnel to determine if a change in technology would be possible.

Finding future resources to support your technology may also affect your decision. Colleges and universities no longer teach some older technologies causing a dwindling number of people able to support them. Keep an eye on your technology and the resources available to support your systems for the long run.

## Customization

In the early days of computers companies would build custom software from the ground up to run their business. This created a very functional system but one that was built without thought for technological upgrades or the possibility of integration with newer systems. These systems had a tendency to be so narrowly focused on specific requirements that changes in business processes or industry direction would quickly render them inefficient.

As ERP systems became more prevalent in the 1990s, companies found that while ERP software provided most of the general functionality they needed, there were certain requirements that were not available "out of the box." Vendors offered customizations to meet these specialized requirements that required changes to the source code, but ended up taking the company off the upgrade path. This meant that over time, the company was left with outdated functionality and technology, and no support.

Other challenges for companies with customized and custom developed applications include:

**Tribal knowledge.** The people that helped develop and define the system requirements are the only people that can make the system work on an ongoing basis.

**Technical documentation.** Outside resources have difficulty supporting the application because it is not very well documented. If documentation exists it is typically very general and doesn't address specific issues that may arise.

**Training.** Only that handful of employees with tribal knowledge can train new employees, and ongoing training is minimal.

Newer ERP systems have made great strides in offering expanded functionality for unique requirements. Moreover, they offer tools to modify the software rather than customize it. Modifications allow your company to make changes to the software independently from the source code. Customer defined fields are built into the system that allow for entry and reporting of unique data you need to capture. The net effect is that modifications can be made to the software without moving off the upgrade path enabling you to take advantage of new capabilities and technologies without losing the key functionality you need to run your business.

## Software Technology Key Considerations

As you evaluate the impact your technology has on your organization you should consider the following questions:

- Is the technology you are using an asset for your company?
- What integration issues do you currently have? Can they be alleviated by having a single ERP solution?
- What are your IT staff capabilities? Are they willing to change to a new technology?
- What other support resources are available for the technology you are using (or considering)?
- Have you customized your software so much that you are off the upgrade path and lack support for your version of the software?

Buying a new business software system should give your company the ability to:

- Take advantage of new capabilities in order to make technology a competitive advantage for your organization.
- Make modifications while remaining on the upgrade path.
- Keep up with the technology requirements of your industry.
- Identify and eliminate redundancy and manual data entry in multiple systems.
- Obtain more accurate data.

The ERP technology should be a strategic asset to your organization. You should be able to take advantage of key technology advances to increase your ability to serve your customers and increase revenue.

**When you buy an ERP system, you are not just buying a static product. You are actually forming a relationship with the vendor in which they continue to develop and support the software in a manner that will be helpful to you for many years.**

# Software Vendor

Sometimes the reason a company changes its ERP system has nothing to do with the software itself or the business processes associated with it. It has to do with what is happening with the software vendor. Two key factors have a big impact on the decision of many companies to move to a new system, the vendor's software development and support, and the effect of a vendor acquisition or merger.

## Software Development and Support

When you buy an ERP system, you are not just buying a static product. You are actually forming a relationship with the vendor in which they continue to develop and support the software in a manner that will be helpful to you for many years. Your annual maintenance fee funds new functionality, technology updates, and support.

As you evaluate your current system, you should investigate what the vendor has done to enhance the product both functionally and technologically, focusing on whether the enhancements are meaningful for your organization. You are paying a significant annual maintenance fee and you want functionality and technology that is useful to you. Have the improvements been a strategic asset to your organization, or is the vendor creating new functionality that does not match what you need?

Vendor support is another key element to consider. When a company feels it is not getting proper support from its vendor, it begins to look at other support options. This may include bringing support in-house or looking for some other third-party support organization.

If dissatisfaction with the vendor becomes too great, some companies end up discontinuing their maintenance payments. They may find it too costly, have too many customizations, or do not see the value in being on the latest version of the software. Over time, the system becomes outdated and they get to the point where their version is no longer being supported. The company gradually loses operational efficiency and eventually finds they are so outdated and have so much risk of data loss and system failure that they begin the search for a new system.

## ERP Vendor Acquisitions

In the past decade, ERP software vendors have gone through a large number of mergers and acquisitions that have altered the vendor landscape. This has resulted in change of ownership of many software packages. ERP vendor mergers directly impact every user of the software products involved.

When acquiring other companies, software vendors have different strategies for the ERP systems they buy. In some cases they continue to sell, maintain, and upgrade the system as if it were a standalone company. This means very little change in their relationship to their customers. In other cases, they acquire products for the user base, and although they continue to support the product for a time, they do not invest in or improve it. The goal of this kind of acquisition is to move the user base to another product in the software vendor's portfolio. To do this, they offer a reduced migration fee and then milk the user base for maintenance fees until the majority of users leave the system and the revenues being collected no longer justify the cost of continued support. At that point they begin to sunset the application and users are forced to either change to one of the software vendor's other products, or select a new vendor.

Right after your software product has been acquired by a competing vendor it is usually very difficult to predict what will happen. The vendor may not even have thought out a strategy for the product yet. This means that you have one or two years when you will not experience a significant change in support. But as time passes, and the vendor's strategy becomes solidified, you will notice changes to their culture, direction, and support. At that point you should evaluate whether the vendor is still a match for your company or whether the ownership changes warrant selection and implementation of a new system.

# Software Vendor Key Considerations

As you evaluate the impact of the software vendor on your ERP system and organization, you should ask the following questions:

- Have upgrades to the functionality and technology been useful to your organization?
- Do upgrades take a lot of resources, time, and money to implement?
- How well has the vendor supported you?
- Is the software vendor financially stable? Are they a takeover risk?
- What is the history of the software? Has it been acquired multiple times?
- Is the vendor maintaining good sales momentum or are they simply supporting older customers?
- Do you feel comfortable working with this software vendor? Are they a cultural match with your company?

These questions are not entirely quantifiable. Indeed, some of the answers will be based on gut feeling. Evaluating a software vendor is more than just evaluating their software product. It is an evaluation of people—how well you work with them and how well they support you. A stable vendor with a good install base, a continuously developing product, and close cultural fit can be a strategic asset to you for many years.

Buying a new business software system should give your company the opportunity to:

- Maintain a relationship with a software vendor that will develop the functionality and technology of most interest to your organization.
- Get proper support for your ERP investment.
- Have a financially stable vendor to support your software for many years and mitigate the risk of acquisition.
- Help you focus on getting a good culture match for your company.

## Reporting

Reporting is one of the biggest reasons companies move to a new software system. Older ERP systems collect data very well, but have difficulty retrieving data for reporting purposes. In order to make an ERP system a strategic asset, the data that resides in the system needs to be output in a usable form in order to make timely and informed decisions. The key issues faced by companies with regard to reporting are ad hoc queries, reporting delays, and graphics.

### Ad HOC Queries

Ad hoc queries are one of the most limiting factors of older ERP systems. Many organizations find that generating reports is cumbersome and time consuming. Because older systems rely on preconfigured reports, creating a different view of the data is very difficult. If management needs a non-standard report, IT personnel are frequently required to create it. This takes them away from other projects and work activities. In fact, some organizations have an IT group whose sole purpose is to write and run reports for executive management.

Modern ERP systems offer very flexible reporting capabilities. In fact, these reporting capabilities have become so user friendly that with minimal training, end users can actually put together their own ad hoc queries on the fly. This has enabled executives and users to report on data without having to ask IT personnel for assistance. Ad hoc reporting and analytical capabilities allow users to produce reports for executive management, financial management, operations, and industry and government regulatory requirements.

In addition to the standard reporting query capabilities, integrations to tools such as OLAP (online analytical processing) allow you to export data to a “data cube” that can be used to slice and dice your data in different ways, providing innovative views into the performance of your company.

## Reporting Delays

In order to facilitate transactional efficiency, many older systems' reports are run in batches, usually overnight after the data in the system has been updated. This means that data is not available on a real time basis. Queues can get backlogged during heavy reporting periods such as year-end close. This can be a significant limitation when a quick response to changes in policy, procedure, or customer demands is required.

Modern ERP systems offer the ability to query data at any time. This provides real time data to management immediately when needed. Executive dashboards are also available that display critical reports and information on the desktop to enable executives to monitor conditions by the minute. Workflow alerts can be set up so that when key metrics change, a report can immediately be sent to the responsible personnel enabling real time actions to efficiently manage and run the business.

## Graphics

It is much easier to see trends and areas of concern in graphical format rather than the long lists of numbers older systems print out. Because older systems do not offer convenient ways to provide graphical reports, users end up re-keying data into spreadsheets and other desktop productivity tools that offer graphical presentation capability.

Modern ERP systems offer significant built in graphical reporting capabilities. Reports can be formatted on a real time basis and run as often as necessary. Because many people still use spreadsheet tools such as Excel to manipulate data, most vendors have developed one-button import/export links to these tools.

## Reporting Key Considerations

As you evaluate the impact of reporting on your ERP system and organization, you should ask the following questions:

- Do you get the reports you need to manage your business?
- How are ad hoc queries run? Does IT need to support them or can users run their own reports?
- What does it take to get your reports? Is there a lot of work behind the scenes to gather the information necessary?
- Are reports delayed due to limitations of the system?
- Do you get graphical reports that enable you to quickly pinpoint trends and variances?
- How easy is it to export data to outside tools like Excel?

A new business software system should provide your company with:

- A library of predefined reports with the ability to modify queries.
- Simple ad hoc query tools that allow even the most technology-averse employees to format and create their own reports.
- Access to data and reports on a real time basis.
- Dashboards that display critical information for decision makers on a continuous basis.
- Consolidation and presentation of data in graphical form without resorting to external systems.
- Links to spreadsheet and other database tools for manipulation of data and formatting of reports.
- Integration to more robust third-party data analysis and reporting tools such as OLAP.

Reporting is one of the most important benefits of implementing a new system. The ability of modern ERP systems to extract and manipulate data on a real-time basis gives management an effective tool to make decisions for the organization.

# Total Cost of Ownership

Total cost of ownership (TCO) is the accumulation of all costs—not merely software costs or IT costs—associated with making a system carry out its purpose. Many organizations have no idea what the total costs are to operate a system because only a handful of costs are “hard,” quantifiable costs. Hard costs such as software license fees and maintenance fees can be easily defined and are readily accessible. Soft costs are not readily visible as out-of-pocket costs, but cost the organization in terms of productivity and time. In fact, if you were to just look at hard costs, a new ERP system will typically appear to be the more expensive option. However, as you evaluate the total cost of your system, accounting for both hard and soft costs, you may find that a new system is warranted because of the productivity gains, time savings, and increased revenue opportunities that a new system brings.

The table below lists the most common hard costs you should consider as you calculate your TCO matched with similar hard costs associated with a new system. Because the approximate useful life of a software system is seven to twelve years you should extend your TCO analysis at least seven years.

## Hard Costs

Costs	Current Systems	New Systems
<b>Software</b> <ul style="list-style-type: none"> <li>• Purchase price of software license</li> <li>• # named users</li> <li>• # concurrent users (simultaneously in the system at one time)</li> </ul>	<ul style="list-style-type: none"> <li>• Balance of software license fees</li> <li>• Finance charges</li> <li>• Ancillary systems</li> </ul>	<ul style="list-style-type: none"> <li>• Software license fees</li> <li>• Finance charges</li> <li>• ISV or ancillary systems</li> </ul>
<b>Implementation</b> <ul style="list-style-type: none"> <li>• Ratio of implementation to software license</li> <li>• Estimate range from 1:1 to 3:1 or higher</li> </ul>	<ul style="list-style-type: none"> <li>• Additional systems to fit gaps</li> <li>• Implementation of periodic upgrades</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation</li> </ul>
<b>Maintenance</b> <ul style="list-style-type: none"> <li>• Range of 18–25% of software license fees</li> </ul>	<ul style="list-style-type: none"> <li>• Current annual maintenance fees</li> <li>• Interfacing and integration maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated annual maintenance</li> <li>• Interfacing and integration maintenance</li> </ul>
<b>Support</b>	<ul style="list-style-type: none"> <li>• Standard support fees</li> <li>• Extended support fees</li> </ul>	<ul style="list-style-type: none"> <li>• Standard support fees</li> <li>• Extended support fees</li> </ul>
<b>Hardware</b>	<ul style="list-style-type: none"> <li>• Hardware maintenance</li> <li>• Hardware upgrades</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase of new hardware if necessary</li> <li>• Estimate of future upgrades</li> </ul>

## Soft Costs

Soft costs are subjective and based on estimates. A full analysis will require you to examine how your organization uses the ERP system and all the ancillary pieces that make the system work. You have to apply hourly rates to people and their activities, and estimate the time required to perform certain functions. Evaluating soft costs forces you to place a dollar value on intangibles.

The following table lists common soft costs and includes some high level assumptions you can make to help you quantify them in terms of dollars. As you evaluate the cost of a new system, you will need to estimate productivity improvements that lead to time and cost savings for each of the areas listed below.

Category	Assumptions	Current Cost	New Cost
<b>Internal Application Support</b>	<ul style="list-style-type: none"> <li>• # FTE x average burdened salary to maintain hardware specific to ERP</li> <li>• # FTE x average burdened salary to maintain application</li> <li>• # FTE x average burdened salary to support users</li> <li>• # FTE x average burdened salary to create reports or adjust reporting formats</li> </ul>		
<b>Upgrades</b>	<ul style="list-style-type: none"> <li>• # FTE x average burdened salary to implement upgrades and make modifications</li> </ul>		
<b>Training</b>	<ul style="list-style-type: none"> <li>• #FTE x average burdened salary to complete initial and ongoing training</li> </ul>		
<b>Business Processes</b>	<ul style="list-style-type: none"> <li>• # FTE x average burdened salary for estimated time lost to inefficient business processes</li> </ul>		
<b>Duplicate Entry</b>	<ul style="list-style-type: none"> <li>• # FTE x average burdened salary for multiple data entry</li> <li>• # FTE x average burdened salary for extracting data from multiple systems</li> </ul>		
<b>Application Response Time</b>	<ul style="list-style-type: none"> <li>• Time lost waiting for ERP and sidebar systems</li> </ul>		
<b>Custom Development</b>	<ul style="list-style-type: none"> <li>• #FTE x average burdened salary for additional customizations and modifications internally developed</li> </ul>		
<b>Reporting Tools</b>	<ul style="list-style-type: none"> <li>• Additional reporting tools needed to consolidate information</li> <li>• FTE IT staff needed to create and run sophisticated reports</li> </ul>		

## Conclusion

All businesses at one time or another have to weigh the costs and benefits of retaining an older ERP system against the costs and benefits of selecting and implementing a new one. Legacy systems, although on older technology, provide companies a level of comfort—comfort that is likely at the sacrifice of increased relevant functionality and technology.

Older ERP systems cause many challenges for organizations. Inefficient business processes are often dictated by these systems and are supplemented by workarounds created by inventive users to maximize personal productivity. Technology is impacted by integration issues, availability of support resources, and customizations that do not allow upgrades for enhanced functionality and technology. Mergers and acquisitions have altered software vendor's relationships with their customers. Reporting does not offer timely information to decision makers. Finally, the total cost of inefficient processes and maintenance of a legacy system may justify the cost of implementing a new system to improve efficiency, customer service, and revenue generation.

These drivers have caused many organizations to change their ERP systems. But the right answer for your organization will arise from the unique challenges you are facing. As you discover the reasons that other organizations have made a change to their ERP systems, you will be able to evaluate if the timing is right for you to take advantage of the capabilities of modern ERP software.

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