



Manufacturing ERP software selection demystified: How to evaluate ERP platforms

There are many choices and considerations in the manufacturing ERP software market—and navigating the many options to find the right choice for your organization can seem like an overwhelming task. So, SearchManufacturingERP.com turned to the experts at Panorama Consulting Group, a Denver-based firm specializing in selection, implementation and effective deployment of ERP software. Now you can get the benefit of their significant experience working with many organizations and products. In this E-Book, get their tried-and-true advice for determining requirements, selecting software and leading a successful implementation.

As the experts at Panorama write, “Choosing an ERP software package is one of the most important decisions your organization will ever make. It is also one that will have long-lasting effects, positive or negative, on your company’s financial performance. Given the importance of such a decision, it is worth taking the time to make the vendor software selection that is right for your organization.” This E-Book offers best practices for SMBs and midmarket organizations evaluating ERP platforms and provides suggestions on how to avoid procurement pitfalls.

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Does an ERP implementation make sense for your organization right now?

By Panorama Consulting Group, SearchManufacturingERP.com Expert Contributors

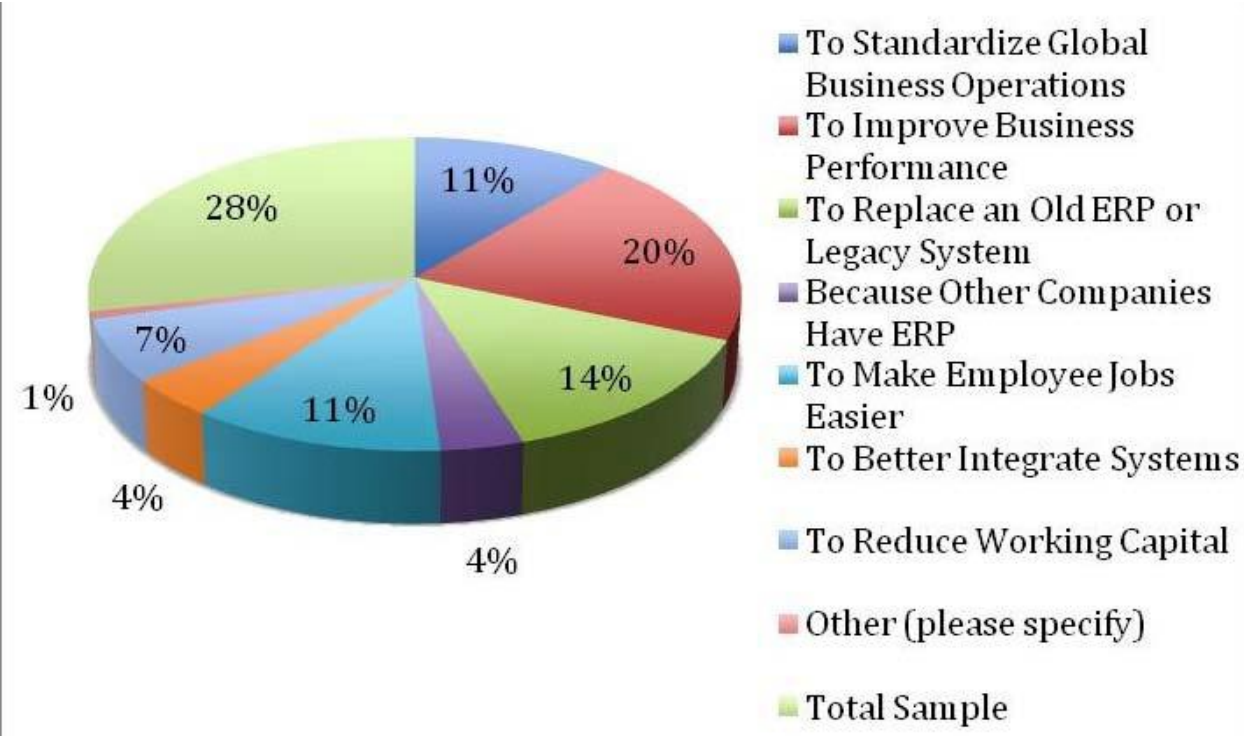
Some ERP industry analysts predict that, because of current economic conditions, many companies will avoid investments in new ERP software in 2009. However, our data tells a different story. Here at Panorama Consulting Group, we are seeing an increase in the number of companies wanting to use the downturn as an opportunity to use available resources to implement new enterprise software. A recent poll on our website indicates that 55% of respondents are planning either to start or continue implementing new ERP systems in 2009.

There are several reasons why many companies see 2009 as an ideal time to select and deploy new ERP enterprise software. First, a slower economy affords companies the opportunity to use their resources and employees to help implement the software correctly. Second, because many ERP software vendors are aggressively pricing their solutions in response to a slowing economy, clients are now able to procure an ERP solution at a lower cost than in years past. Finally, there are winners in every downturn, and this one is no different. Some clients are continuing to grow despite, or as a result of, the current economy, and these companies are investing in enterprise software that can help them scale for growth.

According to our findings, the main reasons companies implement ERP are: to improve business performance, to replace an old ERP or legacy system, to increase efficiency, and to standardize global business operations.

(See the figure on the next page.)

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For businesses that are considering a new ERP system, it is important first to understand the potential benefits and risks of a new system. ERP is not for everyone. If you are in high-growth mode or your current system and your business processes do not match up, then it may be time for a new system. On the other hand, if your current system works fine and you are not experiencing these types of problems, a new ERP system may be more costly and riskier than it's worth.

Planning for a successful ERP implementation involves more than choosing the right software. It also involves preparation to ensure that ERP enables measurable improvements to your business.

In choosing an ERP or IT software package and planning for the overall project, executives need to make decisions based on objective and unbiased information rather than gut feel. The first step is to determine whether or not ERP is the right direction for your organization. Organizations should consider the following questions before embarking on the ERP vendor assessment and selection process:

1. Why do you want to implement ERP? Before making a decision as weighty as implementing a system that will cost millions and affect your entire company, it's important to have a clear understanding of what you want to accomplish by taking on this challenge. There may be more cost-effective and lower-risk options, such as improving processes, redesigning your organizational structure, consolidating your global supply chain, or implementing a performance management system. In these cases, choosing not to implement ERP may be the best solution. On the other hand, ERP may be the business tool that enables these improvements.

2. What are your business requirements? If ERP is the route you need to take, it is important to look at your desired operational model and use that as a starting point in determining which software to implement. Executives should define and document key business requirements for any package they may select. This includes not only nice-to-haves but also requirements that are "deal-breakers" if the software is unable to accommodate them. In addition, executives should use the process of defining ERP business requirements as an opportunity to improve current operations, efficiency and effectiveness. The last thing a company should do is implement software to automate the same flawed business processes. Instead, the focus should be on achieving measurable business value for your organization, and you should choose the software that best enables you to do this.

3. What is your business case and ROI? This is where many companies fall flat. It is important to understand and document what your total costs will be for each ERP vendor under consideration, as well as your anticipated business benefits. This is important in gaining approval from other executives or your board of directors, and it helps to ensure that you realize the potential benefits of implementing ERP. All costs—including hidden project costs such as internal project resources, data conversion, and lost productivity immediately following go-live—should be included in the business case and ROI calculation for each ERP vendor you evaluate. If the resulting ROI for a particular ERP vendor neither makes sense nor meets minimum investment criteria for your company, then it's probably not a good idea to undertake the project.

Once you have determined that ERP is the right path for your company, it is important to select software that best fits your business requirements and operational model. Executives may choose ERP software vendors based on what their competitors or other large companies have chosen. Is there such a thing as choosing the “right” software? It relates to both the ERP technology itself and the requirements of your specific company. The information you need will not only help you “choose” the ERP software, it will also prepare you with the knowledge to select and implement ERP and have measurable improvements to your business.

Experts advice for the ERP software selection process

By Panorama Consulting Group, SearchManufacturingERP.com Expert Contributors

Most companies that are evaluating potential ERP solutions confine themselves to tier I vendors. If you have a small to midsized business, there are countless other options. For a large company, there are dozens of viable options that can deal with complex businesses and scale for growth.

Here at Panorama Consulting Group, we encourage our clients to go through the ERP selection process with their "eyes wide open." When our company embarks on a software selection project with clients, we start with more than 80 different ERP packages. Most are offerings from established companies with established client bases. Many can deal with complex requirements, such as product configuration, product development management, engineering change orders, project accounting, etc. The only difference is that they don't receive the publicity and marketing exposure that the larger guys have. Based on our experience, they are often a better fit, more flexible, and less risky than typical tier I software options.

There are plenty of viable alternatives to the household ERP names. Many of these companies are well established, with international offices, international customers, and user counts ranging from 10 to 1,000s. And many of their offerings will cost much less to purchase and implement than a tier I option.

In addition, these smaller vendors often provide more functional specialization and industry focus than traditional ERP options. A complex, engineer-to-order type of discrete manufacturer is not likely to want a package that also tries to deal with the processes for high-volume, make-to-stock manufacturing. Instead, you should consider a solution that handles your type of business very well rather than one that tries to be "all things to all people."

Six steps to an effective ERP assessment and software selection

To simplify the evaluation process without overlooking a package that may be a strong fit for your organization, we recommend a multiple-phase process to evaluating vendors. This process includes identifying your “to-be” business processes and business requirements, which are both critical to an effective ERP assessment:

1. Identify both industry-specific and general ERP packages. Based on your business requirements and budgetary needs, you will probably eliminate most vendors. We typically recommend developing a “long list” of six to eight vendors.

2. Once the long list has been compiled, identify the key requirements that a package must have in order to make the short list. These “deal-breakers” should help you arrive at three to four short-listed vendors. Typically, discussing business requirements with each of the long-list vendors and getting an RFI (request for information) response will be the basis for moving to a short list.

3. Conduct a detailed assessment and analysis of the short-list vendors. Identify and prioritize the detailed business requirements that your organization needs in a potential ERP package. From these requirements, create demo scripts to ensure that each vendor demonstrates its product as it relates to your business processes. Vendors like to focus on their strengths and not necessarily on how their software fits with your business. This is the time in the evaluation when you should issue RFPs (requests for proposals) to the short-list vendors. The responses will include their costs, software capabilities, and proposed implementation strategy.

4. During the short-list and demo evaluation, involve key users and ask them to complete evaluations for each of the vendors. These evaluations should be quantitative assessments of how well the vendors’ products address the key business requirements in demo scripts.

5. In parallel with the functional assessments, assess the technical capabilities of the short-listed vendors. This should include areas such as scalability, ability to integrate

with legacy systems, openness of the architecture, etc. These technical factors may be as important as your functional business requirements.

6. Make a decision based on the input from the vendor evaluations and technical assessments. Gather the input you've received from the various assessments, and prioritize the vendors' strengths and weaknesses. Finishing your selection may require more of a quantitative ranking and weighting to evaluate how well each of the packages meets your business requirements.

Choosing an ERP software package is one of the most important decisions your organization will ever make. It is also one that will have long-lasting effects, positive or negative, on your company's financial performance. Many ERP implementations last for 10 years or more. This process may seem overwhelming, but it is a good way to consider a comprehensive set of options in order to arrive at a decision. Given the importance of such a decision, it is worth taking the time to make the vendor software selection that is right for your organization.

By the time your evaluation and selection is complete, you should have a good understanding of the commitment you are making. ERP projects are usually more complex and costly than expected, but it is better to understand that fact before your ERP decision than when you are already in an implementation.

ERP market predictions that you can't afford to ignore

By Panorama Consulting Group, SearchManufacturingERP.com Expert Contributors

Based on current economic conditions, continuing industry trajectories, and newly emerging trends, Panorama Consulting Group has compiled its six top ERP predictions for 2009:

- 1. Continuing growth of the SMB segment.** Because of both the soft economy and the continuing growth of small and medium-sized businesses (SMBs), ERP will continue its widespread adoption in this segment. Thanks to its ability to automate business processes and allow small businesses to do more with less, ERP will continue to become more widespread. However, expect SMBs to proceed with caution and in a cost effective manner.
- 2. Rationalized costs.** The days of implementing ERP at any cost may be over, at least temporarily—hopefully for good. Because capital and IT budgets are under pressure, CIOs can no longer afford to implement ERP without reining in total cost of ownership. This is already causing vendors to price their solution offerings more aggressively to win new business.
- 3. More benefits realization, fewer new implementations.** A pattern we are seeing with our client base is greater interest in stabilizing and optimizing current ERP systems rather than engaging in a replacement of the systems. Because companies are becoming more cautious in their capital spending, many CIOs are looking for ways to leverage their current ERP systems to generate more measurable business benefits that they can take to their executive team.
- 4. Continued adoption of Software as a Service (SaaS).** Numbers 1 and 2 above are driving more companies to look at SaaS offerings. Generally speaking, SaaS offerings require less up-front investment than traditional ERP implementations. They may also provide less flexibility, however, so CIOs need to evaluate tradeoffs carefully as part of their ERP software selection.

5. Emergence of open source. Budgetary pressures will also drive companies to give open source ERP a closer look. Open source allows companies to own and customize the software's source code, providing a great deal of flexibility at a lower initial cost. As with SaaS, however, there are tradeoffs: Such flexibility can introduce costly complexities, and ongoing software maintenance is generally less robust than with an off-the-shelf ERP solution. These tradeoffs need to be considered during the ERP software selection process.

6. Higher adoption in specific industry verticals. Evolving government priorities and a new U.S. administration will probably increase ERP adoption in certain industry verticals. The U.S. federal government is expected to grow significantly in the foreseeable future, and this is likely to increase ERP spending in the government sector. In addition, green energy, labor, legal services, and other industries are expected to benefit and grow, owing to changing priorities in the U.S. These industries are likely to look to ERP solutions as viable options for scaling for such growth.

SaaS ERP vs. on-premise ERP software: Six key differentiators

By Panorama Consulting Group

In uncertain economic conditions, we believe that companies will redefine the meaning of ERP and how they plan to deploy it. Today, the terms “Software as a Service” and “on-demand” describe software functionality as delivered over the Internet from a single application instance that is shared across all users. Software as a Service (SaaS) and open source are likely to appeal to some companies as potential lower-cost and lower-risk alternatives to traditional ERP. However, there are risks that need to be considered along with these two types of ERP offerings.

The beauty of modern ERP packages is that you have options to choose from during your ERP software selection. You can either deploy a solution by hosting it internally on your own servers (traditional ERP), or if you would rather not deal with the software, you can have it hosted somewhere else (SaaS). In the process of ERP selection, though, you should be aware of six key variables that will ultimately factor into the decision that is right for you:

1. Simplicity. In general, SaaS is simpler to deploy from a technical perspective. Because you don’t need to purchase additional servers or physically install the software yourself — you can simply get started with a basic Internet connection—it can be an easy and quick means of deploying the software. On the other hand, the high level of technical ease may create additional business complexities that you may not otherwise experience with traditional ERP (see #2 below).

2. Flexibility. Because traditional ERP is installed on your servers and you actually own the software, you can do with it as you please. You may decide to customize it, integrate it to other software, etc. Although any ERP software will allow you to configure and set up the software as you like, SaaS is generally less flexible than traditional ERP in that you can’t completely customize or rewrite the software. Besides, SaaS vendors are more likely to provide only one version, whether you need the upgrade functions or not, and since the

software is delivered over the Web, you have no choice but to accept them. Conversely, since SaaS can't be customized, it reduces some of the technical difficulties associated with changing the software.

3. Control. Because of #2 above, many companies find that they don't have control over SaaS software as they would like, relative to traditional ERP. This is especially true of midsized or large companies with well defined business processes that cannot be changed to fit the software. Small companies can generally adapt their business processes to the software more easily than large organizations can. Besides, SaaS effectively creates constraints on supplying complex functionality.

4. Accessibility. SaaS uses the Internet to access systems once deployed and maintained off-premises. Since SaaS is entirely accessed through the Web, you are in "a world of hurt" if the Internet goes down. Alternatively, traditional ERP does not require Internet reliability, provided your users are accessing the software from inside your company's network.

5. Cost. In general, SaaS can be deployed at a much lower initial cost and lower total cost of ownership; companies can avoid costly licenses, complex hardware, software infrastructure and no technology maintain needed. This type of cost-effectiveness can be attractive to smaller businesses, but the ongoing annual payment or monthly fees can be higher for SaaS because you're paying to use the software on a subscription basis. Much like leasing vs. buying a car, your payment never goes away as long as you're using the software. It can become costly as you grow and add employees to the system.

6. Integration. Companies that have implemented traditional ERP typically have applications that run on the same platform. They have avoided tough integration issues and improved visibility into operations. Integration is a major issue for SaaS companies, which need to provide on-premise integration for their customers to integrate cloud applications with existing legacy applications. A company with SaaS will be left trying to integrate hosted software from a variety of vendors using middleware from yet another vendor.

At a time when industries and economies are decreasing their growth forecasts into single digits, IDC has predicted that SaaS growth will be more than 40% in the current year. SaaS offers "right-sized, zero-capex alternatives to

Seven ERP software implementation success factors

By Panorama Consulting Group, SearchManufacturingERP.com Expert Contributors

Choosing the right software is arguably the most important consideration in any ERP project. A company that chooses software that isn't a good fit for its business or requires significant customization to support key requirements is more likely to overspend on its implementation budget. A diligent ERP software selection process minimizes the risk of choosing a solution that is a bad match for your situation.

Simply asking "yes" or "no" questions about software functionality, as is common in many RFPs, can be misleading. Different packages handle certain functionality with varying degrees of success. Companies should define business requirements as part of their ERP software selection process—and would be well advised to define their desired business processes so evaluation teams can consider potential ERP software packages in the context of company workflows.

The world of ERP is tainted by horror stories of projects gone wrong. Companies such as Shane Co. have had widely publicized complaints about ERP software vendors because of a failed implementation. In some extreme cases, these companies sue because they couldn't ship product or their entire business shut down because the software did not work correctly.

So how does one increase the likelihood of ERP success and ERP benefits realization? Many assume that success or failure is the fault of the software you purchase. In reality, though, 95% of a project's success or failure is in the hands of the company or team implementing the software, not the software vendor.

Here are a few ERP implementation critical success factors that we have seen:

1. Focus first on business processes and requirements. Too often, companies get tied up in the technical capabilities or platforms that a particular software application supports. None of this really matters. What does matter is how you want your business operations to run

and what your key business requirements are. Once you have this defined, you can more easily choose the software that fits your unique business needs.

2. Focus on achieving a healthy ERP ROI (return on investment), including post-implementation performance measurement. This requires doing more than just developing a high-level business case to get approval from upper management or your board of directors. It also entails establishing key performance measures, setting baselines and targets for those measures, and tracking performance after go live. This is the only way to truly realize the benefit potential of ERP.

3. Strong project management and resource commitment. At the end of the day, your company owns the success or failure of a large ERP project, so you should manage it accordingly. This includes ensuring that you have a strong project manager and your “A-players” from the business to support and participate in the project.

4. Commitment from company executives. Any project without support from its top management will fail. Support from a CIO or IT director is fine, but it’s not enough. No matter how well-run a project is, problems arise (such as conflicting business needs), so the CEO and your entire C-level staff needs to be on board to deal with some of these.

5. Plan up front. An ERP vendor’s motive is to close a deal as soon as possible. Yours should be to make sure it gets done right. Too often, companies jump right in to a project without validating the software vendor’s understanding of business requirements or its project plan. The more time you spend ensuring that these things are done right at the beginning of the project, the less time you’ll spend fixing problems later on.

6. Ensure adequate training and change management. ERP systems involve big change for people, and the system will not do you any good if people do not understand how to use it effectively. Therefore, spending time and money on training, change management, and job design is crucial to any ERP project.

7. Make sure you understand why you’re implementing ERP. This is arguably the most important one. It’s easy to see that many big companies are running SAP or Oracle and maybe you should too, but it’s harder to consider that maybe you don’t need an ERP system

at all. Perhaps process improvement, organizational redesign, or targeted best-of-breed technology will meet your business objectives at a lower cost. By clearly understanding your business objectives and what you're trying to accomplish with an ERP system, you will be able to make a more appropriate decision on which route to take, and that may or may not involve ERP.

It is important to understand exactly what you are as an organization now and what you want to be in the future. This includes everything from understanding your strengths, weaknesses and core competencies to the areas you would like to improve. Making these decisions in the midst of an ERP implementation can be a very rushed process, and making key strategic decisions like these in a sloppy fashion will create significant pain and confusion in the future.

The key takeaway is that ERP cannot be implemented successfully without clear requirements, which are critical to ERP success. By the same token, clear requirements cannot be defined until business processes are well defined. And business processes cannot be defined until organizations establish a clear sense of strategic direction. Organizations should ensure that these areas are taken into consideration during their ERP assessment and software selection processes.

Resources from Consona



[The Enterprise Resource Planning \(ERP\) Selection Process Survival Guide](#)

[The Best Way to Buy ERP Software in 2010](#)

[Six Steps to a Successful ERP Implementation](#)

About Consona

Consona ERP software and services are matched closely with specific customer needs, incorporating deep industry knowledge and experience. Plus, they are continually enhanced to meet evolving customer requests and suggestions. Notable for ease-of-use, fast navigation, tailored views and tight security, Consona applications deliver the functionality without the fuss – solid applications that make users' jobs easier, not more cumbersome.

Consona ERP software products are designed to bring the entire company together by offering broad application coverage that allows all departments to use the system effectively, including management, sales, engineering, purchasing, operations, manufacturing, quality, customer service, finance, accounting, and human resources.

Resources from Plex Systems



[10 Critical Questions to Ask a Manufacturing ERP Vendor](#)

[Tips for a Pain Free ERP Implementation](#)

[ERP in Manufacturing AXIS Report](#)

About Plex Systems

Plex Systems, Inc. develops Plex Online, a comprehensive Software as a Service (SaaS) solution for the complete manufacturing enterprise and the only solution to achieve the prestigious Champion ranking in Aberdeen Groups "ERP in Manufacturing AXIS Report." Plex Online offers industry-leading features for virtually every department within a manufacturer, including Manufacturing Operations Management; and Quality Management Systems for the shop floor, Customer Relationship Management for sales and marketing, Supply Chain Management for procurement, and Enterprise Resource Planning for finance and management. Plex Online' delivers a "shop floor to top floor" view of a manufacturer's operations, enabling management to run their business at maximum efficiency. Founded in 1995, Visit www.plex.com for more information.

Resources from SAP



[Aberdeen Group: Enterprise Strategy Report - Global ERP Functionality Differences](#)

[ERP and BI: When 1 + 1 = 3](#)

About SAP

SAP's vision is for companies of all sizes to become best-run businesses. Best-run businesses transform rigid value chains into dynamic business networks of customers, partners, and suppliers. They close the loop between strategy and execution, help individuals work more productively, and leverage technology for sustainable, profitable growth. This vision is in keeping with SAP's mission to accelerate business innovation for companies and industries worldwide - contributing to economic development on a grand scale.