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ERPS are no simple fix; Most printers have solid plans around their equipment and may have strategies for workforce development. But your firm may need ERPS to stay competitive.

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Finding that elusive competitive advantage continues to grow in complexity. Most printers have solid plans around their equipment mix and can readily articulate strategies around upgrades or replacements. Another key resource in which to invest is your workforce. But in addition to having solid strategies around people and equipment, printers also need to develop a sound strategy around the information management infrastructure required to improve business. To this end, enterprise resource planning (ERP) software continues to evolve as a solution in helping printers compete.

ERP systems are designed to improve the management of key business information. While they are intended to simplify the complexity of information management, understanding the software options available and how to determine your best solution can be difficult. ERP is defined as any software that provides the functionality of at least two systems. So software tying an estimating system into an accounting system would be classified as an ERP system, even though most of the information-processing needs of a business remain unaddressed.

Most people view ERP software in a more comprehensive light, expecting the solution to replace many free-standing legacy MIS systems. In perhaps a perfect ERP world, the software solution would replace all existing information systems and provide integrated software solutions to a company's entire information-processing needs. The combination of business functionality within a system tends to minimize ongoing maintenance costs and simplifies the training requirements as your software becomes standardized.

One of the beauties of ERP systems is their modular structure, allowing a company to implement systems incrementally, even when ultimately heading towards a complete solution. Typical modules an ERP system could address include: workflow management, capacity planning and scheduling, cost estimating, quality control, purchasing, inventory management, supply chain planning, order entry, accounting, billing, human resource management, payroll,

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benefits, customer relation management and project management, to name a few.

Choosing an ERP vendor to work with provides a printer with a wide range of options. To begin, you can classify vendors into those who are print-industry centric and those who provide solutions both within and outside the print industry. Several ERP providers focus exclusively on the print industry. Value provided here includes an intimate understanding of the unique requirements of printers. These vendors speak the language of print and have insight into the nuances of a print business.

Within this classification, vendors range in their degree of print-centeredness. Some offerings are very machine-focused with an emphasis on JDF connectivity and passing job information and costing data seamlessly around the plant. Machine data collection is key to both the elimination of waste through improperly passing along job specifications as well as in providing management with critical data on plant performance. Systems allowing seamless movement of job information help printers become leaner in their performance, as non value-adding processes are eliminated with the ERP system. This type of system is focused on workflow improvement in the manufacturing process, but typically requires connectivity with other systems to manage functions such as human resources and accounting.

Other vendors focused on the print industry provide more comprehensive solutions that attempt to address overall information processing. All vendors sell their software in modular form, allowing a print firm to build a customized solution to meet its needs.

Examples of vendors operating within the print industry space are Avanti Systems, Heidelberg, Hiflex, EFI, Kodak, MAN Roland, Prism and Radius Solutions, among others. Of these, Heidelberg's ERP solution centers on the Prinect suite of workflow managers. Prinect's three core software applications focus on prepress, press and post-press operations. Prinect is print-centric, focused on equipment JDF compatibility to optimize efficiencies and reduce waste. It feeds data into other ERP systems, such as EFI's Hagen, to manage broader info flow.

EFI has a suite of foundational products and additional modules to offer printers comprehensive solutions. Its approach is broader-based than many firms, as the firm takes a global view of the business and provides a wide array of products addressing both the range of functionality printers require, and the different requirements of different sized printers. EFI has a solution for most every printer's needs and is continually expanding modules to address evolving needs of printers. Examples of this include fulfillment and variable-data management.

Prism has long been a leader in the ERP industry for printers in Australia and New Zealand, and has been aggressively expanding its product offering organization in the U.S. It, too, takes a comprehensive system view of ERP and has core offerings for both small businesses and larger industry players. Prism differentiates its product by offering a single database solution focusing on the touch-points with a customer and how to best integrate into them.

Kodak is developing a comprehensive software solution for the print industry with a product called EMS (Enterprise Management Solution). This is a complete workflow solution for the industry encompassing front office, back office and production functionality. EMS is currently being beta-tested and is expected to be released shortly.

Hiflex (also see p.14) offers fully integrated ERP software products that precisely model and support all business processes in printing plants. Radius Solutions, meanwhile, caters to MIS/ERP systems for both packaging and printing companies.

Avanti Computer Systems has provided graphic arts-management software for 24 years, with more than 350 North American installations. The Microsoft gold-certified partner features modules for estimating, costing, scheduling, shop floor, fulfillment, inventory and purchasing.

"Avanti uses common database tools, providing meaningful and easy to read information," says Mark Terry, president of Terry Printing Inc., Janesville, WI. "Better reporting allows us to accurately evaluate profitability by product and by customer and to precisely track usage of equipment and materials. Avanti also helps our sales team manage more sales,

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while helping our customers manage their print information."

Multiple vendors also exist with general ERP solutions that focus on businesses and industries outside of print. Value provided from these vendors can come from their broader, robust offering of software modules and their extensive experiences implementing solutions in varying scenarios. Many customers of printers have ERP software from a general provider, making it potentially easier to establish seamless connectivity between systems although all systems communicate and can pass information between them as part of a solution.

A downside of general providers of software can be the lack of print-specific solutions like JDF capability for manufacturing processes. These needs are typically addressed through third-party add-ons to the core software. SAP has a leading market share in many industries and is the "system of record" for magazine publishers. It has successes at many different levels in the print industry, though its target market for customers typically starts at about \$200 million in sales. Providers like SAP provide scale and tremendous strength in general business processes while tending to offer less print industry-unique detail. They generally rely on third parties to bridge these gaps. Examples of other, more generic, solution providers are Oracle and Microsoft.

Any ERP installation causes a printer to take a hard look at its business processes. Choices have to be made between altering how you do business to fit the software solution and customizing the software to fit how you do business. There is no magic formula to determine which direction is best. Customizing a solution is more expensive and creates possible issues with being able to easily update your software over time. Additionally, customizing a solution creates the need for customized documentation of what you created, another cost to include.

Conforming to generic solutions is less costly but arguably could diminish your competitive advantage, since your processes will be more similar to others using the same solution. The key, and a clear benefit of implementing an ERP solution, is to force a company to examine all of its processes and determine where it is adding value (and where it is not). System implementations allow a company to redefine how it does business and clean up non value-adding process steps.

Another important factor to consider is the overall direction of your business. ERP solutions must address your business as it currently exists but need to also address where you envision your business is headed. This is an area many in the print industry do not adequately consider. Strategically, many printers are no longer defining their businesses as solely providing print but as providing customer-focused solutions to problems. This direction has offered printers opportunities to develop ancillary services beyond traditional print offerings. ERP software must be able to address manufacturing and services beyond the complexities of print as printers business grow in complexity-a trend that will only continue to increase with time.

As software solutions grow in their comprehensiveness, trade-offs grow as well. Solutions to single, focused problems can be quite specific addressing singular issues. As systems grow in the number of processes they address, invariably it becomes clear that more focused software could provide a better solution to individual areas. However, a key benefit of an ERP system is the seamless integration of data when moving information within a system built expressly for this purpose.

Every system will have some components, or modules, that better address your perceived needs than others. The value of having a comprehensive solution with guaranteed integration of data has to be weighed against optimizing individual pieces of your business and then figuring out how to integrate information from individual systems. ERP solution providers offer the value of having their core business being focused on writing code and developing software solutions. For many printers, this is a competency best left to vendors who specialize in this work. Attempting to implement individually optimized solutions within your business, and then owning the integration of these systems, can be a taxing drain on resources and margins within the print business.

On the topic of margins, cost is a key consideration when determining direction with an ERP system. Costs can be

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broken into four categories: software, hardware, maintenance and transition. Vendors will quote initial costs to license or acquire the software code for your chosen solution. These will vary based on the number of modules you choose to implement along with the degree of customization you require.

It's likely that additional hardware will be required for implementation, as ERP software typically adds a level of robustness to a company's data management. Another key cost is the ongoing maintenance fees for the software. These typically fall within the range of 15% to 18% annually of the cost of the software. Maintenance fees provide for software support as well as for software fixes and some level of upgrading to keep your software current. Software must be maintained and upgraded just as you lubricate and maintain a press to keep it operationally optimized.

Transition costs to implement the ERP solution must be understood as well. The time to implement ERP solutions varies with the degree of complexity but can easily range from two to four weeks for a simple, generic package, to six months or more for an integrated, comprehensive solution. A comprehensive solution will impact most of your business and many of your internal resources.

Software acquisition costs will usually include a certain amount of training provided by the vendor. Training can be the tip of transition costs to consider. A key to successful ERP solutions is the study and improvement of your business processes. While vendors can help, this work must be done by the people who know the work best. They also have existing jobs and commitments to get customer work out, so the task of implementing ERP software must be well thought out and understood. In complex installations, many companies develop formal transition teams where employees are tasked solely with the implementation focus to ensure proper attention is paid to the process. Obviously, thought has to also be put towards where these employees go when the transition process is completed.

Transitioning to new systems is disruptive. It is certainly easier to not do this and to stay with existing methods and systems. ERP systems continue to develop solutions for the print industry. Your customers are not sitting idle; they are continuing to develop and demand more robust linkage to their supply chain. Your competitors are not sitting idle either; everyone is in the business of improving their offering, whether it is equipment, employees or information processing. While it is tempting to create your own custom solution, there are excellent ERP solutions available from within and outside the print industry. What is your company doing to stay competitive?

How Broad Do ERPs Go?

Kevin Cooper

A number of vendors describe their offerings as enterprise resource planning (ERP) solutions for printers. A quick Google search for "ERP and printing" will turn up several links-some obscure and others that fit.

There's also a trend to organize print from the buy side of the equation, so the systems implemented will complement the customer/buyers' needs-not necessarily the print provider's. Kodak's MarketMover Network is an example of this. Powered by Four51, MarketMover is using technology to build printer partnerships.

Four51 recently partnered with Vision33, a full-service IT consulting firm and an SAP gold partner, to provide development, sales, implementation and customer support services for the new Four51 Edition for SAP Business One. The Four51 Edition, unveiled last fall at the Print Solutions Conference in Las Vegas, is a single integrated application that joins the business-management functionality of SAP Business One with Four51's Web-based print procurement network. Vision33 is working with Four51 to complete the integration of Four51's e-commerce platform with SAP Business One. Vision33 has extensive experience with small and midsize businesses.

Four51 has formed a group of nine beta partners for additional testing and development support for the new edition. Prograde, a print distributor in Cincinnati, is Four51's alpha partner, testing the earliest version of the application.

"Our alpha and beta partners will be instrumental in steering the features and functionality of the Four51 Edition for

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SAP Business One," says Rich Landa, co-founder and president of the Solutions Group at Four51. "The depth and diversity of the group will help us meet the most specific requirements and demands of the print distribution business."

Website hot links at graphicartsonline.com

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