The ABCs of ERP

An Introduction to ERP Solutions for the Division 8 Industry
Expansion, like most everything else in business, is a balancing act.

Unless properly controlled, it will harm your business more than help it, as unforeseen or unplanned growth can spiral overhead, costing time, money, existing business, or even your reputation. Alternatively, simply maintaining the status quo to limit the expenditure of resources is usually a shortcut to obsolescence. Figuring out how to grow profits, and not just headcount, requires experience, guts, and an eye for detail.

So the question faced by anyboy who would grow his business becomes: how do I increase my output without consuming a directly corresponding amount of capital, man-hours, or other resources? The answer is to scale your operations by implementing an ERP solution.

Definition of ERP

ERP, or Enterprise Resource Planning, is the description given to software applications that integrate core business functions, like estimating, order management, accounting, and logistical management, into a single system to simultaneously increase capacity and cost savings. For the construction product industry, specifically Division 8 and Division 10 manufacturers and distributors, ERP solutions should also include functionality that supports contract sales, change order management, shop orders, special materials ordering, contract billing, route and delivery scheduling, service, and installation.

At their most basic, ERP solutions scale productivity by supporting, or completely replacing, manual systems and processes with automated systems and processes. For example, a single, integrated estimating, ordering, and invoicing platform can allow project managers to access accurate and up to the minute information about the health and financial situation of their projects - information that would otherwise be too difficult or time consuming to uncover. Such visibility can have a huge impact on decision-making, customer success, and the overall financial viability of the company.
Evolution of ERP

To understand what a modern ERP solution is, and why so many of them are so different, it’s important to know where ERP solutions first came from. While the term ‘ERP’ was coined in the 1990s, the root of the solution can be traced back to accounting systems from the 1960s. These relatively simple programs expanded to include reconciliation functions and status reports for inventory control, a family of functionality that came to be known as MRP (Material Requirements Planning).

As demand for the kind of reliability and efficiency offered by automated accounting spread to other areas of the organization, MRP solution publishers added functionality to manage production processes and scheduling, and coined the enhanced system ‘Manufacturing Resource Planning’, or MRP-II. With the integration of customer relationship management, analytics, and advanced planning, MRP-II transitioned into what we would recognize today as ERP software.
Objective of ERP

The obvious productivity gains promised by integrated business operations clearly show the potential of an ERP solution. However, the real value of ERP lies in its ability to recast the traditional relationship between risk and reward.

We’ve all heard the golden rule: in order to win big, you’ve got to take big risks. This certainly holds true in many business cases, however when implemented intelligently, the right ERP solution can transform that relationship, making it possible to achieve greater stability and profitability through minimized work and exposure – a phenomenon we call Work Small/Win Big. By in order to capitalize on the expanded promise of ERP, owners must carefully consider various ERP options, and implement only a solution capable of meeting the challenges unique to their businesses.

Traditional Relationship Between Risk and Reward

The traditional risk/reward relationship is proportional; as risk increases, so do the potential rewards.

Risk and Reward After ERP

ERP solutions have transformed the traditional risk/reward relationship, making each potentially independent of the other.
Components of ERP

The standard features that an ERP solution should include - its definition, if you will - varies considerably depending on the software publisher or expert that's providing it. Even general terms describing the component functional areas of a solution can have fairly divergent practical applications from industry to industry. Job Costing, for instance, looks different to general contractors than it does to made-to-order manufacturers, but since job costing is a standard requirement for most ERP deployments, it would be easy to assume it means the same thing to everybody. To ensure that you get what you actually need, it is important to carefully review and understand how common descriptions apply within a specific ERP solution.

Today there is a broad spectrum of ERP options available on the market. Picking the right one involves careful business analysis, preparation and research; and for the door and hardware industry there are additional special considerations. Whether your company is looking for a simple accounting program like Quickbooks or a comprehensive platform, doing the legwork up front, or working with a trusted consultant who knows the ins and outs of the ERP world, will go a long way in your overall satisfaction (and profitability) down the road.

ERP functionality for Door and Hardware Manufacturers and Distributors

- **Financial Accounting**: accounts payable, accounts receivable, collections, general ledger, and asset management
- **Management Accounting**: cost management, and budgeting
- **Human Resources**: recruitment, training, payroll, benefits, and retirement
- **Order Processing**: order entry, pricing, credit checking, inventory management, and sales analysis
- **Supply Chain Management**: planning, scheduling, product configuration, order to cash, and warehousing
- **Project Management**: resource planning, project costing, billing, expenses, and performance management
- **Contract Accounting**: billing, accounts payable, contract management, and budgeting
- **Manufacturing**: bill of materials, work orders, scheduling, workflow management, and life cycle management
- **ERP**

[Flowchart image of ERP functionality for Door and Hardware Manufacturers and Distributors]
ERP for Door and Window Suppliers

Division 8 supply businesses are challenging to effectively operate. Often, managers depend on old school, people-based workflows and homegrown processes to track and manage a staggering amount of detail—all on relatively thin operating margins. Additionally, the estimating, ordering, fulfillment, and billing practices of the door and window supply industry are uniquely ‘contract-based’, rendering ERP solutions that work for most other industries inadequate.

For a Division 8 supplier to truly benefit from an ERP solution, it must do two things in addition to the ‘standard’ functionality found in generic ERP offerings: convert tribal knowledge into business assets, and support existing workflows.

Supporting Existing Workflows

No matter how efficient an ERP solution may be, it has no value in an organization that cannot adopt it. There is often a discrepancy between industry-specific practices and how software is designed to manage or account for them, leading to the need for customization, manual workarounds, or supplementary technology. In the early days of ERP, the gap between how programmers thought the work should get done and how it really got done was significant. Fast forward 10 years and the gap has narrowed, but when you make a living in an industry with highly specialized project management and accounting requirements like building material supply, even a narrow gap can be daunting.

Remember, the main purpose of all ERP solutions is to enable employees to be more efficient. The more an application mimics how employees already work in the real world, the more it will be used, and the more efficient they are. The resources required to train existing employees, force adoption, and reengineer business processes to us a system that is not intuitive may not be justified by the hoped-for long-term gains. The easier an application can integrate into existing operations, and the closer it mimics industry-proven practices, the greater the opportunity to realize a Work Small, Win Big benefit.

Creating Business Assets

Tribal Knowledge is a nickname given to crucial yet undocumented information or processes relating to a specific job, task, customer, or project. Tribal knowledge is passed from one employee to the next on an informal basis, or as the need arises, and is not retained by a company once the employee who owns the knowledge leaves.

Tribal knowledge can be:
- Special arrangements made between customers and vendors, such as relationship-based pricing, freight policies, or credit terms;
- Contact information of trusted suppliers that resides only in a personal cell phone or home PC; or
- Complex, Excel-based project management or accounting workarounds constantly reinvented by different employees attempting to solve the same problem.

Tribal knowledge is often crucial, yet never recorded in a way that makes it an asset of the entire company. Converting tribal knowledge into ownable IP, proprietary systems, standard workflows, or efficient processes is a key benefit of a comprehensive ERP solution. Once recorded, it becomes an asset that can be shared to drive revenue, maintain quality, increase margin, or enhances valuation.
Evaluation of ERP

There are four different types of ERP solutions available to the building products supply industry, and like many things, there is no one right solution. What works for your biggest competitor might not work for you, so it’s important to look at your business needs objectively to find an ERP solution that meets the criteria you’ve set out. It is best to stick to a defined set of parameters when evaluating different solution types, thereby keeping the comparisons as uniform as possible. There are many issues to consider, but for the sake of this analysis, let us keep to the following basic criteria: implementation, customization, complexity, adoption, support, integration and ease of use.

### Generic ERP

We’ll begin with the off-the-shelf variations of ERP software that cover basic business needs like accounting, inventory, sales, and purchasing. Generic ERP software is perhaps the easiest to install, but also difficult to customize or retrofit into unique workflows. To remain attractive to the largest possible market while still providing for individual requirements, generic ERP solutions will usually integrate with popular third-party applications. But even here the emphasis is on simplicity, and robust functionality is abandoned in favor of widely applicable features. So, for example, a window and door manufacturer who wants to integrate estimating and engineering into his automatic processes probably won’t get everything he needs to take control of the future of his business. Generic ERP systems are not designed with specialized industries in mind, so chances are employees will need to undergo substantial training to efficiently leverage even basic functionality. A clear upside, though, is that a generic feature set and integration landscape are easier and more straightforward to support – as long as you’re not trying to make the software do backflips it wasn’t designed to do. A generic ERP platform will also likely boast a seasoned customer support department and knowledge archive that will prove to be valuable assets for a business that is likely to choose this option in the first place.

A simple, less mature product supply business with a minimal catalog and little special order traffic, especially one that does not plan on growing or changing dramatically in the coming years, would do well to consider a generic ERP solution. It is not realistic to expect a Work Small/Win Big benefit from this kind of solution because the business is relatively simple to begin with and there is no a lot of complexity to mitigate. However, there certainly is an advantage to automating basic business processes and accounting tasks, and the ease of implementation and support will help users get there quickly. All in all, generic ERP solutions represent a moderate risk, and a minimal reward.
Construction ERP

Not your general catch-all ERP software, this type is considered a “teaser” solution for the supply segment of the industry. While construction ERP solutions offer include project and job costing, as well as some management functionality, they are designed specifically for the contractor. The jargon is spot-on, both in the marketing material and in the user interface itself, but the solution is not built for material supply, contractor-based sales and service. The challenge here is to distinguish between a solution that has been built to meet the needs of the contractor and one that has been built to meet the needs of the business that supplies the contractor. Most software publishers aren’t even aware there is a difference, and will market to both audiences as if they are the same.

It goes without saying that these are a bad fit for the supply segment of the construction industry. Regardless of availability of support, ease of implementation, or ease of use because they will not deliver necessary core functionality. In fact, generic ERP solutions are often better alternatives to this type, as generic solutions do not contain industry-specific customizations that alter that core functionality. Semi-tailored construction ERP solutions are an extremely high-risk/low-reward gamble for all but a very small percentage of the division 8 space.

Industry Specific ERP

The concept of ERP software has been around long enough that most industries, no matter how small or specialized, are serviced by at least one offering that started out as an in-house solution. Home grown ERP software solutions are often built by people who used to do what you do now, who have wrestled with the same issues, and who had the ingenuity and resources to create a perfectly customized solution. They can be a good fit for small, standard supply businesses because they likely support some of the more complex business processes (though important but ancillary functionality is probably not available), and include features that turn tribal knowledge into business assets. They usually remain boutique in nature, so customer service (when available) can be more responsive than a large generic provider’s, and there is little need for customization as long as your business model doesn’t differ from what’s typical in the industry.

However, when it comes to implementation, or for situations that call for customization or integration with a third party, industry specific solutions are very limited. Large software publishers, the guys who offer generic ERP solutions, spend a huge amount of resources maintaining and standardizing their code base and improving their core feature set. They sponsor vast communities of specialists and resellers who write their own functionality into the code and provide in-depth implementation support. They do this to increase the long-term value of their product for the largest potential piece of the market. Boutique offerings don’t have the bandwidth to cover all those bases, and generally won’t even try. Their code base is closed, so there is no point in standardizing it, which discourages third parties from writing custom functionality or integrating with it.

In short, industry specific ERP solutions are at least as risky as generic solutions because you’ll be doing most of the heavy lifting on your own. And while in the short term you may be getting a lot of reward in the form of tailored functionality, you are locked in to something that likely won’t grow at the rate you will, necessitating a new system down the road. So compared to generic ERP offerings, industry specific software bears a greater risk with a questionable long-term reward for anybody expecting to expand their operations or hoping to grow their business.
Industry Tailored ERP

Industry tailored ERP software can be described as a combination of the strengths of both generic and specific solutions. Like generic software, tailored offerings are based on a widely accessible, well supported, and constantly updated code base that encourages abundant third party integration. Combined with multiple configuration and pricing plans, a stable and evolving solution makes purchasing and supporting a tailored ERP solution very cost-effective over time.

However, the greatest advantage of this alternative is the affordability of industry specific functionality. Unlike their industry-specific counterparts, industry-tailored publishers can leverage an external, existing infrastructure and focus all in-house attention on providing ‘out-of-the-box’ specialization. The result is a product that fits as well as a boutique solution (very little adoption and ease-of-use risk, and support for complexity), but that is as secure in the long term as an enterprise-class generic offering (easy to implement, support, customize, and integrate).

Industry tailored ERP systems hold the greatest promise of delivering a long-term Work Small, Win Big benefit, and prove to be the best option for building product manufacturers or distributors that plan to expand into new territories, markets, or product lines. While possibly more expensive at the outset, such solutions usually provide the quickest returns, and provide greater ROI over time.

Minimal Risk and a Maximum, Long Term Reward

Industry tailored ERP applications provide the same support, integration, and implementation benefits as a generic solution, while delivering the high adoption, robust feature sets, and easy usability that comes from in-depth industry focus. The net result is rapid deployment, early ROI, and long-term added value.

Choosing an ERP

Selecting and implementing an effective ERP solution has never been an easy process - but it can be relatively straightforward if you are aware of all the alternatives. The greatest challenge building products supply manufacturers, distributors, and servicers looking to automate and optimize their operations face is a lack of exposure to viable software options.

To work smarter, take stock of your business goals, opportunities, strengths and weaknesses, then partner with a solution provider who specializes in the type of ERP platform that will best ensure you realize a Work Small, Win Big benefit. For the vast majority of businesses, the answer is an industry tailored ERP solution from a provider who understands your unique business challenges, and who customizes a world class code base to meet them.

Right now, with the continued rise in home starts and commercial building activity, the building products supply industry is enjoying massive expansion. It is time to take stock: is your business ready to handle increased demands? Are your processes scalable? Is automation being used effectively? If the answer is ‘no’ to either of these questions, growth is just as likely to break your business as it is to strengthen it.