

GUIDE TO ERP: Make the Right Choice for Your Business



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Introduction

Midsized manufacturers and distributors are at a crossroads: A global economy is providing ample opportunity for growth, but the limits imposed by legacy technology are preventing many from reaching the next level and keeping pace with larger competitors.

Resource management systems—specifically, enterprise resource planning (ERP) software—are so critical to a manufacturing or distribution business, companies that stick with aging technology and outdated processes are needlessly inhibiting their own growth.

"An ERP upgrade is not just tinkering around the edges," says Laurie McCabe, Cofounder and Partner at SMB Group, a market research and analyst firm focused on SMB technology adoption. "It's about creating a more streamlined business that's more responsive to customer demands and puts you on a more competitive plane."

The current business climate is ... complicated

The competitive landscape is complicated and continuously changing for manufacturers and distributors. Here's a snapshot of what your business may be experiencing:

- Worldwide commerce has created more dispersed and complex supply chains. Business partners and suppliers may no longer be across town, but rather scattered across multiple regions, domestically and overseas. A global footprint makes it harder to collaborate with partners, manage schedules, and track orders and raw materials. "In a global supply chain, with more inventory coming from overseas, tracking becomes problematic," says Eric Kimberling, CEO and Founder of Third Stage Consulting Group. "US businesses are making fewer commodity widgets and more complex products. Lack of visibility becomes a real limitation."
- Accelerated go-to-market timetables and compressed product
 delivery cycles are upending traditional operations and straining business
 processes and legacy systems. Customers demand a regular stream of
 new product features and other innovations at a rapid clip. As a result,
 manufacturers and distributors are under pressure to recast business
 processes and put new, highly automated systems in place that can
 support more agile and responsive operations.
- Digital-savvy customers have higher expectations when it comes to
 how they research, configure, and buy manufactured goods. Much like the
 average consumer, customers in the business-to-business (B2B) sector
 are taking cues from their personal experiences, expecting their business
 transactions to be as simple as buying a book on Amazon, streaming a
 movie on Netflix, or paying a bill on their banking app.
- A stricter regulatory climate demands more rigorous controls to ensure traceability of supplier activity, product composition, and the flow of logistics. Without a proper audit trail and the right safeguards in place, businesses open themselves up to significant monetary penalties as well as other business risks. At the same time, a rising tide of data privacy laws, including the European Union's GDPR (General Data Protection Regulation) and the new CCPA (California Consumer Privacy Act), requires similar controls around how companies manage customer and other sensitive data.

These challenges are significant on their own. But outdated technology and manual, inefficient processes make the hurdles even harder to overcome, particularly for midsized companies that are growing beyond their current capabilities.

"Midsized companies don't have as many transactions [as larger businesses], but they face the same amount of complexity," says Cherry Williamson, Owner/Member of Emerald TC, a software consultancy and Sage business partner.

Adds McCabe: "Companies that are growing are doing higher volumes and more complicated transactions and interactions. Keeping track of all that gets harder and harder to do if you don't have a comprehensive technology solution."

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Laurie McCabe

SMB Group



What's holding back your business?

Midsized manufacturers and distributors likely have a core set of financial management capabilities that can handle accounts payables and receivables. A manufacturer may also use a rudimentary manufacturing resource planning (MRP) solution for managing shop floor operations. For the most part, however, basic business management tools such as Excel and QuickBooks were not built to keep track of sophisticated processes for managing supply chains or product lifecycles.

"Beyond the obvious functional challenges, especially on the lower end, legacy systems don't scale very well and there are limitations from a database standpoint," notes Russ Graf, Vice President of North American Sales for NETSTOCK, a provider of a cloud-based inventory management solution resold as Sage Inventory Advisor. "Firms are looking to grow the business and expose data to other players in the supply chain. The platform can be a limiting factor in those cases."

The lack of a shared data set—a "single source of truth"—and integrated workflows ultimately stands in the way of effective decision-making.

Technical limitations often force manufacturers and distributors to cobble together separate systems to manage operations, production, HR, marketing, and other functions. These disconnected systems lead to information silos that make it difficult to get an accurate view of business performance.

"Adding in [third-party software] without integration to existing systems most likely creates more work and potential data inconsistencies and errors," says John Hoyt, Partner and Senior Consultant at Next Level Manufacturing Consulting Group, a software consultancy focused on the manufacturing sector.

The lack of a shared data set—a "single source of truth"—and integrated workflows ultimately stands in the way of effective decision-making, inhibiting manufacturers and distributors from properly managing and forecasting inventory or identifying potential productivity bottlenecks.

An incomplete or disconnected view of data across the business can impact materials planning, creating a need to carry excess inventory to protect against stockouts—which drives up costs. A lack of visibility into costing, resource allocation, or work-in-progress inventory can further erode profitability or create finished goods or delivery backlogs that lead to frustrating delays for customers.

Business leaders may acknowledge the need to modernize their systems but hesitate to sign off on a major technology upgrade if they don't have the in-house expertise or resources to handle complex software deployments. No one wants to risk a single moment of downtime for a software migration that could slow production or bring operations to a temporary halt. So, they play it safe and try to make the best of their current systems.

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"Midsized companies can struggle to adopt technology that goes beyond simply taking orders and shipping inventory," says Hoyt. "Many software packages may be very expensive and too complex for their situation, so they stick with what they have. It may be costing them more to not make a change, and without doing a feature and cost/benefit analysis, they don't have sufficient information to make that decision."

Indeed, trying to get by with barebones technology or outdated processes can end up being even more risky and expensive.

"If you're working with disconnected systems, and you have any desire to grow, it will get more painful the longer you put off moving to an integrated application approach," says McCabe. "The bar keeps getting higher in terms of what people who want to work with you expect. It's like strep throat—the longer you wait to go to the doctor, the more your throat will hurt."

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Next-Generation ERP at work

Problem: TRI Industries manufactures laser toner cartridges and other imaging supplies, but its real purpose is ensuring the employment of people with disabilities. The nonprofit, established in 1977, builds high-performance, eco-friendly office supplies that meet the quality standards put in place by the federal government's AbilityOne Program. AbilityOne is an initiative designed to open up employment opportunities to more than 45,000 people who are blind or have other disabilities, including 3,000 veterans.

Like many manufacturers operating for decades, TRI Industries began to hit roadblocks resulting from outdated supply chain processes and procedures. Specifically, the manufacturer kept bumping up against inventory challenges, which stood in the way of proper planning and caused persistent problems with overstocks, replenishment, and accurate lead times for product delivery.

The company eventually brought someone in to build a custom inventory replenishment application, but the system ended up being too cumbersome and didn't perform as accurately as required.

"It would take about a half a day to run our inventory levels," says Jay Burrell, vice president and COO at TRI Industries. "It worked well, but it couldn't look at things like lead times, special overstocked inventory, o

anything that had trending data. We knew there was a better solution."

Solution: With guidance from a trusted partner, MicroAccounting Solutions, TRI Industries was steered to the Sage 100 ERP system and, specifically, the Sage Inventory Advisor add-on module. Sage Inventory Advisor's user-friendly dashboards, classification matrix, and sales forecasting capabilities helped the manufacturer overhaul and optimize its faltering inventory processes.

Benefits: Six months into deployment, TRI Industries was able to create some baseline performance goals. For example, TRI had a fill rate of 94% when first implementing the Sage Inventory Advisor system, but it wanted to boost that figure to 96% – a benchmark it eventually exceeded, with recent metrics showing a 97.8% fill rate. The software has enabled a smarter replenishment strategy, which in turn reduced costs and freed up cash flow. The half-daylong replenishment process now takes under an hour to complete, and the software's extensive and highly accessible dashboards make it easier to showcase key items and issues to key stakeholders, which ends up saving both time and money.

"If you can reduce your inventory-carrying costs and your inventory levels, that frees up cash to do other things," Burrell says. "If you can do that and improve your customer performance, that's a win-win all the way around."

Business benefits of next-generation ERP

The status quo is no longer an option for manufacturers and distributors looking to remain competitive in today's fast-moving business climate. They need a system that helps them control costs, increase profitability, and offer guaranteed quality by optimizing processes, automating workflows, and increasing visibility across the entire supply chain.

Upgrading a technology platform is "part of the normal lifecycle for a company," says Joe Jenders, Founder and President of Vrakas/Blum Computer Consulting, a Sage 100 business partner specializing in the manufacturing sector. "If you're a successful business, you'll grow—and at some point, QuickBooks will no longer meet your needs."

Upgrading to a fully functional ERP platform, especially one that is based on an open foundation and provides a clear but measured path to the cloud, will help companies on a number of fronts, including:

Simplified financial processes. Don't underestimate the time and effort you probably spend on the most common financial transactions, from initiating payroll to reconciling your books. A next-generation ERP platform can help you save time and increase accuracy with standard operations such as monthly bank reconciliations.

"A lot of companies have islands of information—a spreadsheet or QuickBooks or a custom database that the owner wrote when they first started the business," says Williamson. "You end up touching the same data multiple times—you do the quote in Excel, when you get the order you key it into QuickBooks. If you are a manufacturer, you may have all of your bills of materials and work orders in the custom app, and inventory may be tracked on a whiteboard in the warehouse. You need to streamline all that with better tools to reduce errors that inevitably come from re-keying all that data."

Look for a solution that goes even further, with automated capabilities for detecting unrecorded transactions, locating errors and differences, recording corrections, and mapping books to bank statements.

More accurate reporting will also help your business remain compliant with regulations, from tax codes and audit histories to emerging privacy and security laws such as GDPR and CCPA. In addition, integrated budgeting and planning capabilities can foster collaboration among different departments. This integration can accelerate planning cycles and more tightly link budgeting activities to operational performance, ensuring that your resources are aligned in support of strategic goals and tied to proven metrics.





Better visibility across the business. Managing critical data and processes with spreadsheets or legacy accounting and ERP systems becomes more challenging as your business grows. Lack of integration remains a significant pain point for businesses with older technology.

"For businesses that have complex supply chains or complex products, there's a lot of data there—product master data, bills of materials, all the way through to the sale and financials attached to it," says Kimberling. "You need full visibility across all of those components."

A modern ERP platform provides employees across finance, sales, administration, procurement, and production with a "single source of truth" that connects workflows, creates greater visibility across the business, and empowers more intelligent decision-making.

"With one application that's driving everything, no one has to re-key data at every step of the process, and everybody has visibility to the same information," says Williamson. "Then you can start to push things that help grow the business. People grow in their jobs as the computer does more. You can deliver better customer service. You're transforming from need-to-know information to visibility that truly helps the business as a whole."

Enhanced reporting and analytics. One of the bigger challenges of legacy systems is limited reporting functionality and, more specifically, the ability to generate meaningful insights from reports. For example, "without integrated costing, it might be a month before you know if what you're making is profitable," says Jenders. "And it's hard to react to changing conditions such as the cost of materials or other market changes."

When considering a new ERP system, it's critical to look for functionality that enables quick, efficient, and accurate data capture and analysis to optimize budget planning cycles and arm various departments with the real-time information they need to make better decisions.

"You want to reduce reliance on guessing and gut instincts," says Kimberling. "There's some risk with that, especially when employees who have a lot of tribal knowledge leave the company. The functionality you get in a modern ERP system, such as Al-based analytics or more advanced planning and forecasting capabilities, gives you better predictability and the ability to anticipate demand and production needs."

Intelligent reporting is critical to gain visibility and context to help management teams better plan for the future. This capability assumes that you have timely and accurate access to data across your business, and that you have the ability to distribute that data to partners, says Graf. "You want to turn data into information that you can make decisions on today—things that impact your profitability *right now*," he says.

"With one application that's driving everything, you're transforming from need-to-know information to visibility that truly helps the business as a whole."

Cherry Williamson

Emerald TC

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Predictive analytics, combining past data with third-party data, can improve demand forecasting, says Kimberling. For example, a manufacturer of irrigation products could look at internal sales data to identify buying patterns, and then combine that information with regional weather patterns to better anticipate spikes in demand. It could then cascade that forecast into an MRP system for the next quarter to more accurately produce to the anticipated demand. Similarly, a distributor could use AI models to analyze historical sales data and macroeconomic trend data to create more robust and accurate models for forecasting that trickle through the entire value chain, Kimberling explains.

Real-time reporting and accurate forecasting ensure optimized stock levels and accurate order fulfillment, including maintaining traceability of inventory receipts, location, and disposition of goods.

"If you don't have good material planning, you have to carry excess inventory, which hurts cash flow," says Jenders. "Real-time information allows you to react quicker."

Better business processes. Access to industry-specific business processes and the best-in-class workflows that modern ERP systems offer can help you to optimize core processes without compromising the customizations you need to support your unique needs.

It's important to view an ERP rollout not just as a software upgrade, but as an opportunity to trade up antiquated and ineffective business practices for new processes and workflows that drive efficiencies and reduce costs. For example, if your pick, pack, and ship processes are inefficient because warehouse workers are spending too much time on low-value activities, you're leaving profits on the table.

"People can be wed to their processes even if they're not ideal," says McCabe. "When you're switching to a new system to run your business, it's the ideal time to also think about what you need to change in terms of process to run your business more effectively."

Software vendors with direct experience in manufacturing and distribution are likely to have a set of best practices from deployments across their customer base.

"The people that design these ERP systems know the industry," says Hoyt. "They know what's efficient and what's required for workflows. If you don't have great procedures or controls, you can't go wrong by learning the software and the recommended best methods to use it."

A good place to start is with common pain points in areas such as cash management, general ledger, fixed asset management, monthly reconciliations, invoicing and bill collection, and compliance with existing and emerging tax and accounting regulations.

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Next Level Manufacturing Consulting Group



"You want to leverage the new technology to drive best practices," says Graf. "When you try to make the new application behave like the old one, why go through the pain of upgrading? The tools are designed to support a best practices model, so whenever possible businesses need to adapt to that."

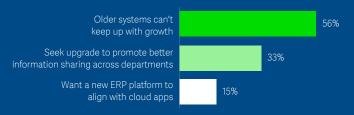
An integrated ERP solution can also have significant impact on your supply chain, specifically by enabling flexible inventory management practices and improved demand forecasting.

The benefits of next-generation ERP are clear. The good news is that getting next-generation capabilities doesn't require you to abandon your on-premise infrastructure.

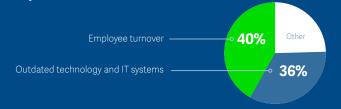
ERP migration: A snapshot for manufacturers

Key takeaways from a Sage survey of midsized companies in discrete manufacturing, conducted in August 2019:

Common pain points due to legacy systems and processes



Top threats to business health



Most important attribute of a new ERP platform

Cloud computing

is viewed as the new technology that will add the most value to the business, compared with other emerging tech such as Al, mobile, and the Internet of Things.

Best-performing features for ERP

Increasing collaboration between departments

is a high priority for midsized manufacturers. Other top-ranked benefits include:

- providing actionable insights
- ensuring regulatory compliance.

Most important benefits of ERP systems



Do you need to move to the cloud?

Software vendors are moving their applications to the cloud—and encouraging their customers to move with them. ERP is no exception. The problem is that many owners of manufacturing or distribution businesses remain wary of the cloud. They don't want to risk mission-critical operations being interrupted by an internet outage. They worry about where and how their data will be protected.

But the tide is changing, particularly as new, younger generations of management take the reins. People are warming up to the benefits a cloud deployment model offers, including scalable storage, anytime/anywhere access to data, advanced functionality, better support, and flexible pricing.

As a result, a hybrid deployment may be the ideal model, because it provides the best of both worlds: You can maintain core functions and data on premises while tapping into new specialty and collaboration capabilities in the cloud, with seamless connectivity between the two environments.

"Hybrid is a win-win," says Williamson. "The engine can still run if the internet goes down, but cloud connectivity can provide access to new things like CRM, inventory optimization, and complementary analytics."

A hybrid ERP model lets you manage a less abrupt transition to the cloud, including tapping into new cloud-based capabilities while maintaining the familiar security controls of older systems. You also retain control over upgrade cycles to ensure that your operations are not disrupted by an unexpected refresh that introduces new functionality to your system.

"Hybrid is kind of a sweet spot," says Jenders. "Having the core on-prem makes a lot of sense, and having some of these add-ons in the cloud also makes a lot of sense. Hybrid gets you closer to the bullseye."

There's a strong business case to be made for the cloud among manufacturers that are connecting more systems and taking in more data than ever before. "When you start looking at the Internet of Things, with shop floor control and connected production machines, there's just a lot more data flowing," says Graf. "The more transactions you're capturing, the more complicated that becomes. That's a pretty strong argument for the cloud."

Determining the best deployment model may seem like a complicated decision, but Graf says it really comes down to answering a single question: "If I have a problem to solve, what's the easiest yet most effective way to do that?"

"Having the core on-prem makes a lot of sense, and having some of these add-ons in the cloud also makes a lot of sense. Hybrid gets you closer to the bullseye."

Joe Jenders

Vrakas/Blum Computer Consulting

Best practices for choosing an ERP system

ERP selection can be overwhelming, with so many options to consider around features, functionality, pricing, and hosting. To ensure the best outcome, consider these basic tenets during an ERP evaluation:

Due diligence: All ERP vendors are not created equal. Some cater specifically to the needs of midsized companies, and some are more experienced in certain industries. Ideally, you want a provider that checks both boxes. For example, manufacturers should seek an ERP platform that provides visibility into the entire production process, including the ability to track costs in real time, identify and remove production bottlenecks, optimize inventory to reduce excess and eliminate stockouts, and drive customer satisfaction through accurate status updates.

Kimberling also recommends that you examine each vendor's product roadmap and how much they're spending on R&D. These factors are particularly important for vendors offering cloud solutions that aren't fully optimized for verticals such as manufacturing or distribution.

KPIs: Identify the key performance indicators (KPIs) for your business and then map those goals to the capabilities of the software you're evaluating. KPIs, of course, will be specific to every company. If inventory optimization is a key objective, steer toward an ERP platform with robust inventory management capabilities; if boosting production quality or reducing materials cost is a goal, make sure the platform has integrated tools for centralizing production processes; if you've recently acquired a business, look for functionality to help consolidate financials.

"If you've identified the big friction points in your existing operations, your KPIs should dovetail with that," says McCabe. "For instance, if it takes people some ungodly amount of time to get things done, start by looking at how a new solution can help you to get these jobs done more efficiently."

Another way to establish KPIs: "Think about what's best for your customers and what's best for your employees—those two usually translate to what's best for the business," says Graf. "That trickles down to the systems you require to accomplish that."

Aligning on business priorities can be a tough conversation to have, but it's critical to defining the right technology path. "Those strategic priorities around what's important to the business are important in determining how you serve your customers or build your products," says Kimberling. "If you get alignment there first, then the requirements discussions around ERP tend to fall into place easier."

Open platform: Every company is different, so a one-size-fits-all ERP platform can be more trouble than it's worth. Look for a solution that offers flexibility for customization and supports an open architecture. An open environment enables seamless integration with other core systems like CRM, inventory management and optimization, production planning, and productivity applications like Microsoft Office.

In addition, the platform should be able to tap into a thirdparty developer community offering complementary tools that extend core ERP functionality. In that way, companies can create a single source of data that can be leveraged across departments and business processes.

Buy-in: The technology piece of the ERP puzzle is far easier to address than the organizational challenges that can arise when you bring on a new mission-critical system. ERP is all about redefining and optimizing core processes. To succeed, you want a vendor that will work with all key stakeholders—the controller/CFO, production manager, heads of operations, purchasing, order entry, and sales—to identify their pain points, understand their needs, and map those against your KPIs. Involving them in the process early on will increase the chances of buy-in across the business.

"Success is about truly listening to what they want, understanding their current processes, and then sharing how a new platform can improve processes and make things flow better," says Jenders. "When you show them that you have a vision, that's what builds consensus."



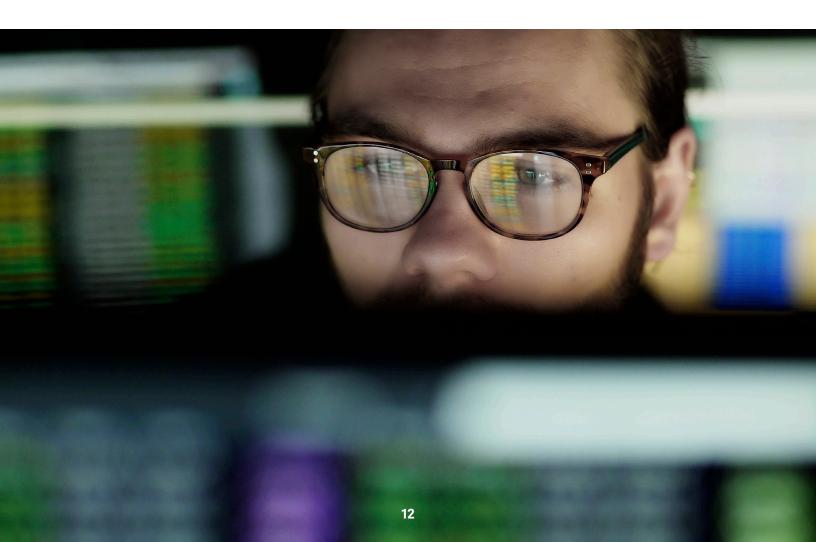
Your path forward

ERP migrations can be incredibly complex and, if done poorly, a significant drain on resources. But as your business grows, can you afford to simply get by with outdated systems that put you at a competitive disadvantage?

Consider a hybrid approach to help you move to a more sophisticated ERP system—with the benefits that come with cloud connectivity—while maintaining your mission-critical assets on premises. The right platform will help you unleash your business and perform to your best capabilities.

"Sometimes the biggest benefit of a new ERP system is a fresh start," says Williamson. "You might be doing things a certain way because your current system makes you do it that way. A new platform should really allow management to take a step back and say, where are we going and where do we want to be tomorrow?"

Ready to help your business perform at its best? Find out what Sage 100cloud will do for you.



For additional information.



RAD Associates is a professional services company that specializes in ERP software implementation with a focus on manufacturing, distribution, construction, and eCommerce companies. Founded in 1991, we provide consulting, support, and implementation services that focus on improving productivity, reducing process inefficiencies, and increasing profitability.

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