ERP VENDOR UPDATE

Industrial Equipment Manufacturing
10 Software Solutions

Insight on Today's Top ERP Providers

ULTRA
CONSULTANTS

INDUSTRIAL EQUIPMENT MANUFACTURERS FACE COMPLEX BUSINESS CHALLENGES.
ESPECIALLY NOW.

It's always been difficult to effectively manage parts, production, people and products. And today, in the wake of the COVID-19 pandemic, it's even harder. Supply chains continue to be unsettled. Distribution channels are disrupted. Costs are rising.

The solution – in good times and bad – is to become more efficient: Fix broken business processes. Eliminate workarounds and manual make-dos. Integrate core systems. Control inventory spend. Streamline the supply chain. Reduce overall costs and improve cashflow. Achieve transparency and visibility into every aspect of operations.

To do these things, you need the right ERP solution. But what is the best solution for your organization?

That's the challenge. Because answers can turn into more questions. Because every organization is different. And because no company handles any phase of operations – estimating, configuration, orders, changes, planning, manufacturing, quality, purchasing, inventory, distribution, shipping, sales and field service – the same way.

ABOUT THIS REPORT

ERP Vendor Update: Industrial Equipment Manufacturing is compiled by Ultra Consultants from interviews with software company product experts, product documentation and product briefings, independent research and Ultra internal documents.

Ultra's Insight is the opinion of our expert consultants, is based on project experience, sales experience and product knowledge, and is not intended to provide a complete review or comprehensive analysis of the products or companies described.

Note: This report covers selected ERP vendors, which were chosen based on market presence, product capabilities and Ultra's recent project experience.

Company and product information in this report has been reviewed by the software vendors featured.

TABLE OF CONTENTS

5 BEST PRACTICES FOR ERP VENDOR SELECTION

Whether your company is implementing an ERP system for the first time, or replacing a legacy implementation, it's critically important to make the right choice.

An ERP solution is, at its foundation, a strategic choice. What new capabilities does your organization need and want? What problems are you trying to solve? What do you want your core processes to look like? How can new tools enable your organization's digital transformation?

We asked our expert consultants to give us their thoughts on best practices in ERP selection for Industrial Equipment Manufacturers, and this is what they told us:

1. Emphasize Industry Experience

Focus on IEM industry experience when choosing an ERP vendor, including (and especially) your particular segment. Here's why this expertise is important: An ERP vendor may have manufacturing industry experience but may not have deep knowledge of the unique needs of your specialized segment. Look at its overall presence in your vertical, too. Is its toolset widely used by companies like yours?

Ask your potential vendors to tell you how they plan to be a leading solution in your marketspace. Evaluate its features and functions to see how well they align with the industry's challenges. Read the case studies and success stories provided by the vendor – they are a good source of insight into how they build solutions for companies like yours. Ask for the product roadmap for your industry segment.

2. Assess the Total Cost of Ownership

Establish a budget in terms of implementation and total cost of ownership (TCO), then ask your potential vendors if your budget and their solution are a fit.

A solution quote usually includes software, first-year support and implementation consulting. (Additional sites and add-on modules will be extra.) TCO, however, is broader, and takes into consideration per-user license costs, training, maintenance, customizations, upgrades, internal costs and other fees.

If the system is in the Cloud or software as a service (SaaS), take a hard look at the Service Level Agreement (SLA) for any hidden costs, such as system enhancements and upgrades.

> **On average, companies spend 17 weeks selecting an ERP solution.**
>
> SOURCE: 2020 ERP Software Report, Software Path

The scale and complexity of most ERP projects make it difficult to get, and stick to, a fixed price. Be aware that ERP vendors that offer a fixed price might exclude necessary work and training. Identify and note all inclusions and exclusions.

3. Consider Technology Strategy

Know that an ERP solution must fit the overall IT strategy of your organization. And because the IT department plays a primary role in determining whether an ERP system is feasible, it should determine and provide any technology requirements at the outset.

If on-premises ERP systems are a consideration, the IT department will need to have the resources to maintain and upgrade the software, as well as be able to provide the necessary infrastructure, servers, databases and security.

If the company is going with a cloud-based system, it's still essential to have the IT department involved in the ERP vendor selection process. There may be connectivity and integration issues with existing systems, particularly legacy on-premises systems.

4. Put the Vendor Under a Microscope

Where will the vendor be in the next five or 10 years? Many niche players have been acquired or merged with other ERP vendors – with both positive and negative results.

What's important to your company? The major ERP vendors offer big, broad solutions that will meet most of your needs. Specialized vendors offer "smaller" solutions that will meet your industry-specific requirements but may not be as strong in some core functions.

5. Speak with Real Customers

Don't let your ERP vendor get away with giving you a list of hand-picked customer references in a variety of industries.

To get the best idea of how a solution will perform for you, ask for references that have been on the solution for at least a year, are in the same industry as your company, are roughly the same size, and have similar requirements. Then make the effort to speak with these customers (particularly their ERP professionals) to get their insight, opinion and feedback. Choose one for an on-site visit.

By applying these best practices, your company will better understand the strengths and weaknesses of potential ERP vendors. And it will be easier to narrow down the list and choose a software solution that will deliver greater efficiency, improved visibility and a competitive advantage.

Top 10 ERP Selection Criteria

- Functional fit
- Industry experience
- Software price, TCO and ROI
- Vendor viability
- Implementation project considerations
- Technology
- Risk
- Scalability
- References
- Post go-live support

EXPERT Q&A:
RAPIDLY CHANGING MARKETPLACE REQUIRES NEW CAPABILITIES

As the IEM industry rumbles through the remainder of a challenging 2021, headed for a potentially more successful 2022, it's important to understand the ongoing evolution of the industry and its enterprise technologies. We asked one of Ultra's most experienced manufacturing consultants, Dave Lechleitner, what IEM companies need to know to thrive in today's fast-changing marketplace. Here is an edited version of the conversation.

Let's start with the big picture: What are the most important trends in the industry?

Dave Lechleitner (DL): Today, a significant trend is the development and deployment of new service models after the sale. In the past, industrial equipment manufacturers were focused on manufacturing their products, but now, with the ability to leverage machine data streams from embedded sensors, companies can offer strong, data-driven predictive maintenance and service offerings.

Also, IEM organizations are getting creative with pricing models based on usage. And some companies are pushing hard to engineer and produce smart machines that require less human interaction and monitoring – or none at all – in order to enable lights-out factories.

So, the industry is seeing rapid technologic change – and a corresponding rapid expansion of what is possible for products and services. What are the challenges?

DL: For many companies, it's a difficult transition from the traditional approach to a new business model. We see organizations that are struggling to move into the future, struggling to adapt their existing systems and struggling to execute the service component efficiently and effectively.

A lot of IEM companies are just coming to understand the impact of the shift from being a product business – where you manufacture and sell the same product over and over again – to being a product-and-service business. They don't have a service team or service organization built. They may be contracting the service component to a third party, and are finding that they need to bring it in-house. They need to create conduits to carry the product and part information to the service side, and to carry service insight back to the manufacturing side.

We saw this with a client recently – a company that builds large, complex products. Its field service people had no product information and no bill of materials, so when they were doing an install, they had no way to know if they had everything they needed or if the customer was getting

everything they ordered. And they had no structured way to communicate the issues and problems they found – information that could have been used to improve service quality, product quality and customer satisfaction.

It's common to have this kind of siloed information. And it's a challenge to manage, analyze and share it across the organization.

How are IEM ERP solutions adapting to meet these challenges?

DL: Field services management is becoming core in IEM ERP solutions. It used to be a bolt-on, or third-party tool, or the solution didn't do it very well. No more.

Cloud connectivity is key now, too, because of the need for a real-time link to machine sensors, the need to convey the data streams required to analyze and optimize production, and the need to connect machines in the field with engineers in the office.

Where should IEMs focus their attention for the near future?

DL: In addition to the development of service capabilities and implementation of two-way data conduits, I think forward-looking, smart organizations will focus on breaking down the silos of information that impede efficiency, impair decision-making and prevent communication and connection. To succeed in a rapidly changing marketplace, IEMs need reliable and complete information, accurate analysis and broad access to data from every part of their organization.

Dave Lechleitner is Industry Marketing Director for Ultra Consultants, with more than 25 years of experience helping mid-market manufacturing companies leverage technology to optimize processes, increase efficiency, maximize throughput and boost productivity.

The Best Solution May Not Be the Biggest Solution

Most manufacturing organizations start ERP selection with a list of the biggest names in the ERP software marketplace, research features, functionalities and total cost of ownership, and then schedule multiple rounds of sales presentations and demos.

Often overlooked in this process are other solution providers that may better support particular industries and their specialized needs.

There are ERP vendors with exceptionally strong experience and domain knowledge in your vertical — and that understand your business and processes at a deep level. They may offer important industry-specific features that bigger ERP solutions do not.

Many times, they may be the best choice for your organization and your unique requirements. You'll never know, however, if you don't include them in your evaluation, listen to their pitches and see how their software works.

Ultra's Insight: A Different Approach to IEM ERP

Rootstock supports multiple modes of manufacturing that may exist simultaneously within a single ERP environment. Specifically, Rootstock supports companies that may deploy a wide variety of production processes such as make-to-stock, make-to-order, configure-to-order, engineer-to-order, project-based, or non-project-based and share resources to meet specific customer requirements.

Rootstock can perform a configure-price-quote (CPQ) unique to a customer but execute the order as a make-to-stock assembly. Various levels throughout the bill-of-material can be executed using

different manufacturing strategies, some of which may be controlled through a project, and some non-project-based, all using one integrated process.

Rootstock is built within the Salesforce cloud platform. This enables Rootstock to instantly leverage the world-class CRM, ecommerce, case management and field service functionality offered by the Salesforce platform. It can also take advantage of Salesforce's foundational technology and functionality, including system security, browser-based environment, analytics, IoT, AI and database management.

Other toolsets integrated with Salesforce also work with Rootstock, including applications for project management, forecasting, transportation and shipping management, quality management, compliance, tax and accounting.

Rootstock plans to continue to take advantage of the functionality that already exists within Salesforce, such as Slack and chatbots.

CATEGORY	FUNCTIONALITY	CORE	ADD-ON	3-P	NONE
Business Intelligence	Reports and Queries	●			
Business Intelligence	Pre-defined Dashboards and Scorecards	●			
Configurator	Configure/Price/Quote (CPQ)	●			
Configurator	Front End Product Configurator	●			
Configurator	Back-End Product Configurator	●			
Customer Relationship Management (CRM)	CRM - Funnel Management			●	
Customer Relationship Management (CRM)	CRM - Opportunity Management			●	
Customer Relationship Management (CRM)	Customer Proposals			●	
Customer Service	Customer Case Management			●	
Customer Service	Customer Portal	●			
Customer Service	Field Service Mobile App			●	
Customer Service	Field Service Management			●	
Demand Management	Qualitative Forecasting			●	
Design-to-Deploy	CAD to ERP Integration	●			
Design-to-Deploy	ECO Management	●			
Design-to-Deploy	Product Lifecycle Management (PLM)			●	

CATEGORY	FUNCTIONALITY	CORE	ADD-ON	3-P	NONE
Distribution Planning	Distribution Resource Planning (DRP)	●			
Distribution Planning	Execution of Transfer Orders	●			
Financial Management	Product Costing - Financial	●			
Financial Management	Product Costing - Managerial	●			
Information Technology	System Security	●			
Information Technology	System Reliability	●			
Integrated Project Management & Planning	Work Breakdown Structure (WBS)	●			
Material Planning and Scheduling	MRP for MTS Products	●			
Material Planning and Scheduling	MRP for MTO Products	●			
Material Planning and Scheduling	Integrated Project Mgmt./MRP	●			
Material Planning and Scheduling	Subcontract Order Planning	●			
Material Planning and Scheduling	Lean Functionality	●			
Material Planning and Scheduling	Capacity Planning - Infinite	●			
Material Planning and Scheduling	Capacity Management - Space			●	
Material Planning and Scheduling	Basic Scheduling Board	●			
Material Planning and Scheduling	Available to Promise (ATP)	●			
Operations Execution	Shop Floor Control (SFC) Tracking & Priority Management	●			
Operations Execution	Bar Code Scanning	●			
Operations Execution	Real-Time Labor/Order Reporting	●			
Operations Execution	Remote Data Capture	●			
Procurement Planning	Supplier Pricing	●			
Procurement Planning	Direct Material Purchasing - Discrete POs	●			
Procurement Planning	Direct Material Purchasing - Blanket POs	●			
Procurement Planning	Customer Supplied Inventory (CSI)	●			
Project Business Automation	Integrated Project Management/ MRP	●			
Project Business Automation	Integrated Project Accounting	●			
Project Business Automation	Project-Integrated Sales Orders	●			
Quality Management	Repair Order Management	●			
Quality Management	Serial Control Track-and-Trace	●			
Quality Management	Lot Track-and-Trace	●			
Quality Management	Quality Compliance			●	
Quality Management	Quality Specifications			●	
Quality Management	Measure of Non-Conformance			●	
Rental Management	Rental Management	●			
Warehouse / Inventory Management	Remote Inventory Data Capture	●			
Warehouse / Inventory Management	Inventory Accuracy Management	●			
Warehouse / Inventory Management	Inventory Value Reporting	●			
Warehouse / Inventory Management	Management of CMI Inventory	●			
Warehouse / Inventory Management	Cross-Docking	●			
Warehouse / Inventory Management	Issue Material to an Order	●			

Customers by Industry
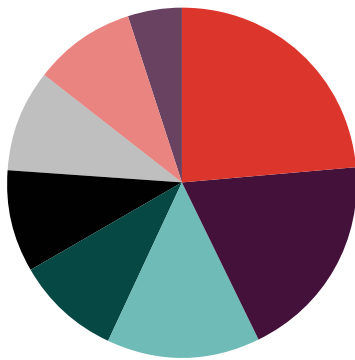
25% General Discrete Manufacturing
20% Medical Device
15% Industrial Manufacturing
10% Project Manufacturing, ETO,
Aerospace in Defense
10% High Tech
10% Cannabis
10% Distribution
5% Batch/Process Manufacturing

Targeted Verticals

- Batch Process Manufacturing
- Cannabis
- Distribution
- General Discrete Manufacturing
- High Tech
- Industrial Manufacturing
- Medical Device
- Project Manufacturing, ETO, Aerospace in Defense

IEM Customers

- Gerotech
- Boston Dynamics
- DICA
- Mark Andy Print Products
- Protech
- Summit Body Works
- Whiting Systems

Strategy

Rootstock targets companies that are evaluating next-generation, cloud ERP replacement initiatives, with an additional focus on organizations that are existing Salesforce clients (or evaluating ERP with CRM). IEM clients chose Rootstock primarily because of its robust features, because it is deployed on the modern Salesforce cloud platform, and because it enables a 360° view of their customers – from sales to service and everything in-between.

Rootstock's Pitch

Rootstock is a modern, flexible, connected ERP. Rootstock enables digital transformation for manufacturing, distribution and supply chain businesses. Our differentiation is that Rootstock is built on 40-plus years of legacy ERP industry expertise, which results in robust functionality perfectly mapped to the business processes of our clients. But, unlike so many of the "old guard" legacy ERP systems, Rootstock is built from the ground up in a modern, multi-tenant, true cloud platform. Rootstock is built inside salesforce.com, which finally delivers on the promise of surrounding your clients with the power of ERP connected to your customer system of engagement, salesforce.

Deployment Options

ON-PREMISES   SINGLE-TENANT   **MULTI-TENANT**

Profile

Launched in 2008, Rootstock Software (rootstock.com) is a global provider of cloud ERP solutions for manufacturing, distribution and supply chain built on the Salesforce Cloud Platform. The privately held company is headquartered in San Ramon, Calif., USA, and has six offices worldwide.

HOW TO SELECT THE WRONG ERP SOLUTION

The enterprise software selection process is a long and complicated process – for several good reasons. The solution you choose will affect the way you conduct business for years to come, and it will impact virtually every function. It's a significant investment, too. And with as much as 50% ERP implementations failing to achieve their goals, it's critical to find a solution suited to your business and its unique needs.

But many organizations get off-track right at the start when they go into the selection process believing in some common myths about the process – misconceptions that can result in the wrong choice for your business.

Here are the **top five misconceptions** that derail the enterprise software selection process:

1. Thinking that technology is the most important consideration.

Many companies replace their enterprise software because it's outdated or no longer supported by the vendor. While these are valid reasons to make the move to a new system, they shouldn't be the only ones. The software selection process is the perfect time to evaluate business goals and map them to your new solution. For example, you may want to reduce operating costs or improve order accuracy. If you have these goals in mind, you're better able to narrow down your choices and request relevant demos from vendors.

2. Assuming that all ERP solutions are the same.

If you've ever bought a new car, you know that every model is different, even those built on the same platform. Each includes various features and benefits, including subtle differences in appearance. It's the same with ERP software. At first glance, it may seem like two solutions are exactly alike. But once you look under the hood, you may learn that one is more powerful. As you test drive it with a demo, you may find that one is more comfortable. The differences often may seem small, but looking critically at them is the key to finding software that fits your business.

3. Believing that a highly detailed RFP is required.

Many companies think they need to spend hours creating lengthy RFPs, which often amount to hundreds of pages. But since most vendor offerings address core pain points, such as automating reports, these documents don't need to be nearly as long. Instead, you should look at the business problems you want to solve with the new software, not core functionalities that typically are the same across multiple vendors. It is more beneficial to create a shorter RFP that includes specific problem areas you need to address.

4. Thinking that an ERP project is an IT project.

While the IT department provides critical input, companies need to get various viewpoints from across the organization when they gather requirements in the software selection process. All too often, important stakeholders are left out of the conversation. Before looking at different systems, assemble a team with employees from every department that uses, or will use, your ERP. Whether it's accounting, sales, marketing, shop floor, warehouse, logistics, operations or any other department, it's important to know the challenges they have and what they need to do their jobs better.

5. Assuming that big-name solutions are always the best solutions.

Many organizations start ERP selection with a list of the biggest and best-known companies in the ERP software marketplace. The big-name vendors offer excellent choices for small, medium and large enterprises in a variety of deployment models. Their powerful products may not be right for your organization, however. Extensive customization may be necessary to meet the requirements of your segment and company. Or you may have to purchase specialized industry add-ons to get it to function the way you want. Instead, consider all the options available.

There are many ERP vendors that offer industrial equipment manufacturing-specific toolsets and broad industry expertise. But there is no one-size-fits-all solution. The functionalities and capabilities required are unique to each subvertical. And finding the best fit starts with evaluating software solutions and functions based on your organization's unique needs.

When considering an ERP project, consult Ultra experts for valuable insight into which ERP software solution will help you reduce costs, improve efficiency and achieve your business goals.

Ultra Consultants is an independent ERP consulting firm serving the manufacturing and distribution industries.
Since 1994, we've helped hundreds of clients streamline their business processes, select ERP software, and implement a complete ERP solution that meets the unique needs of their industry, specialty and organization.

Why Ultra?

It's critically important to choose an ERP consulting partner with experience in your industry, expertise in your ERP solution, and experts who have worked in businesses like yours. And you will want to work with a firm that is independent, flexible and able to help you find the right solution for your organization.

For more than 27 years, Ultra Consultants has utilized its proven methodology, ERP knowledge and industry intelligence to deliver measurable business performance improvements to manufacturers and distributors in virtually every vertical.

• Our services are built for your industry. **We understand your processes and requirements.**

• Our solutions leverage our expertise. **We help you choose software to meet your unique needs.**

• Our results reflect our ERP experience. **We maximize benefits, minimize risk and deliver success.**

Regional Offices	**Midwest**	**West**
	939 W. North Avenue	1980 Festival Plaza Drive
	Suite 750	Suite 300
	Chicago, IL 60642	Las Vegas, NV 89135

✉ contact@ultraconsultants.com 📞 312-319-1411 🌐 ultraconsultants.com