



How Digital Transformation and ERP Can Help You Build Your Factory of the Future

Building a better tomorrow for the industrial
machinery manufacturing industry



Contents

- Executive Summary 3
- Digital Transformation Gets Industrial Machinery Manufacturers Set for Growth 4
- Understanding the Role of Digital Transformation in Business Growth 6
- Where to Invest for Growth 8
- Turn Insight Into Action..... 10
- Get Set for Growth With Epicor ERP..... 12
- How These Grow Getters Made Digital Transformation Work 14
- Next Steps 16

Executive Summary

As an industrial machinery manufacturer, how do you preserve margins and manage risk while also grappling with a market moving more toward configure-to-order, engineer-to-order, assemble-to-order, or build-to-order manufacturing processes? The whole world is your competition so you need to step up to meet increasingly demanding customer expectations.

Your customers expect high-quality products customized to their specifications, yet put you under pressure to reduce costs and cycle times. To meet these demands—given the complexity of estimating and quoting, the challenge of forecasting raw material requirements, and a widening skills gap—you've got to put digital transformation at the top of your agenda.

This eBook will help you understand:

- ▶ The role of digital transformation in growing your business
- ▶ The capabilities you need to support your digital transformation journey
- ▶ Some best practices to implement your digital transformation strategy



Digital Transformation Gets Industrial Machinery Manufacturers Set for Growth

Digital transformation is sweeping through the industrial machinery manufacturing industry as manufacturers move to capitalize on the Internet of Things (IoT), advanced analytics, cloud technologies, artificial intelligence (AI), and more.

Leading industrial machinery manufacturers see these new technologies as game-changers—enabling them to redefine business models, revolutionize internal operations, and improve the customer experience. This is how they thrive when profitability and growth depend on supporting smaller, ever more specialized production runs—despite hard-to-predict material costs, poor visibility of the cost impact of required engineering changes partway through projects, and the challenge of closing the skills gap within your workforce.

When effectively applied through every part of your manufacturing operation, digital transformation gets you set for growth in every way, ultimately letting you take full advantage of an extended ecosystem of partners, suppliers, and customers.

Understanding digital transformation

Digital transformation is a response to burgeoning issues within a global economy that is faster, more connected, and aggressively competitive. It is not an end destination or state of being, but a combination of applied digital technologies and processes that accelerate your business toward its strategic objectives and push it further along the Industry 4.0 track.

Start with strategy

The velocity and scale of technological change can feel as overwhelming and risky as leaping onto a high-speed train. Leaders may wonder how it's even possible to harness the power of digital transformation when technology seems to become obsolete almost as soon as it arrives.

Instead of focusing on all the risks, possibilities, and benefits of new technologies all at once, first define your overall business goals. What do you hope to achieve in the next five years? Will you focus on finding a more efficient engineering change-control process and the associated costs? Are you keen to minimize rework by improving early visibility of quality issues? Are you looking to implement automation technology to help you close the skills gap?

Once your business goals are defined, the digital tools that offer the greatest opportunity to achieve them will emerge. Those technologies can then become part of your growth strategy—steps you'll take on your journey.

In today's world of exponential change, organizations that get too comfortable with the status quo are at major risk of disruption.

—Andrew Vaz, Global Chief Innovation Officer | Deloitte



Understanding the Role of Digital Transformation in Business Growth

High-growth businesses are almost 50 percent more likely than low-growth businesses to identify good planning as a stimulus for growth.¹ While many competing technologies profess to drive digital transformation, the utility of any given digital solution depends almost exclusively on context. You need to understand where you are in your digital transformation journey and how specific technologies will add value to your business.

Against a backdrop of fierce competition and rapid evolution, this means identifying the areas in which you can make the smallest change for the largest return on investment. The starting point in the journey toward growth is to understand your market and business inside out. We refer to this as your ability to “get growth.”

Define your growth objectives

To get started, you need to establish what works, what requires immediate attention, and where digital transformation can add real value. With your clearly defined growth vision, you are ready to set investment priorities for digital transformation.

As an industrial machinery manufacturer, you might focus initially on visibility of customer and production data to feed into forecasting to optimize raw material spend and reduce waste, or maybe on improving cost reporting across the product life cycle—from the product ideation stage through delivery—to enable more accurate forecasting and analysis of profitability. You must take an honest look at which areas are your biggest hindrance to growth—and which areas offer the greatest opportunity for lasting success.

¹ Research conducted by MORAR Consulting, surveying more than 2,000 respondents in 14 countries worldwide (MORAR, Growth Survey, 2017)

The Aberdeen Group identifies three technology trends driving digital transformation for manufacturers:²

- ▶ The Internet of Things (IoT)—to enable a new level of operational intelligence
- ▶ The cloud—for real-time visibility and scalability
- ▶ Big data analytics—to transform data into predictive, actionable operational insights



Derive new operational efficiencies

For forward-looking industrial machinery manufacturers, digital transformation will mean investing in Industry 4.0 technologies that connect, integrate, and automate production like AI and sensors and actuators that facilitate the autonomous exchange of information. IoT technologies such as smart sensors can predict equipment failure and send alerts that trigger automated responses, while 3D printers have the potential to enable rapid prototyping and support specialized production runs.

Differentiate the customer experience

Where digital transformation is a response to increased pressure from customers to manufacture highly customized products, you'll be implementing technology that—for example—helps you increase your understanding of customers' purchasing behavior or better balance the level of product customization with cost and schedule needs. Typically this will be an enterprise resource planning (ERP) solution tailored to manufacturing needs.

Visibility and insight are key

The key to successful digital transformation is having the visibility and insight to understand where technology can add the most value to your business. Manufacturers have more data than ever before, but few possess the technology to derive real value from that data. IDC estimates that less than 10 percent of data held by manufacturers is used effectively.³

To effectively use their data, manufacturers must invest in technologies that add value by providing business-critical insights. Industrial machinery manufacturers investing in an industry-specific ERP solution want one that delivers relevant reporting and intelligence to pursue growth opportunities, as well as real-time, in-depth data to transform day-to-day operations.

Better visibility into all areas of your business enables smarter and faster decisions, brings new operational efficiencies, and enhances the customer experience. Whatever digital transformation looks like for your business, applying the right tools can mean the difference between merely competing and thriving.

² "What Does Digitalization in Manufacturing Mean Now?", Greg Cline, Aberdeen Group, 2017

³ "IDC FutureScape: Worldwide IT Industry 2017 Predictions," IDC, 2016

Where to Invest for Growth

Prepare to deploy your digital transformation strategy

In today's fiercely competitive marketplace, holding onto old processes, siloed systems, and yesterday's way of thinking can make it increasingly difficult for you to compete. Change is necessary to ensure that your products, services, and processes are relevant in the modern digital world.

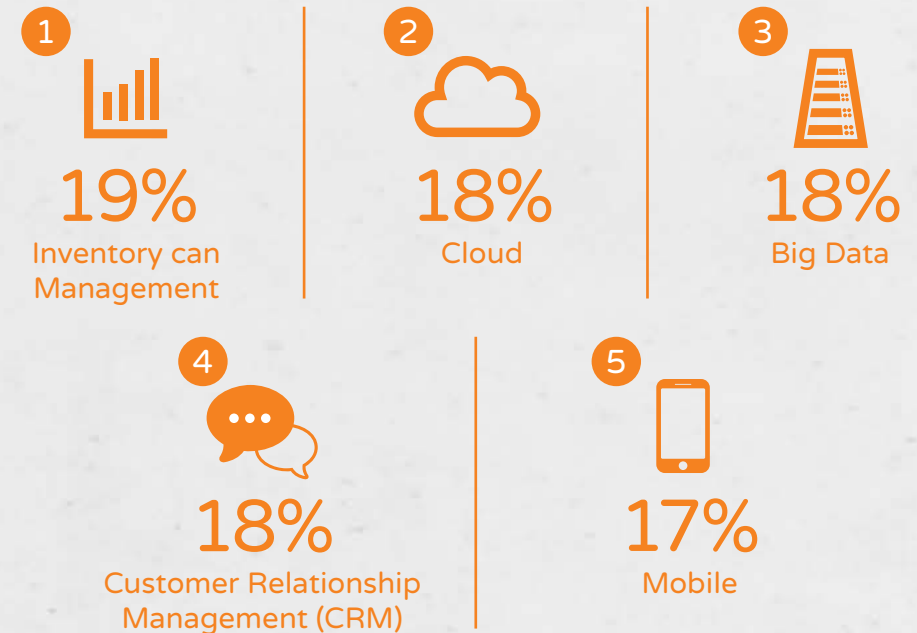
Whether growth for your business means expanding into new markets or doing a better job of meeting existing customer expectations, you need to develop the organizational capabilities to make that vision a reality. We call this being "fit for growth."

Invest in the right technologies

Investing in new technologies is important, but the key is investing in technology that brings strategic value to your business.

High-growth companies invest where it counts. Research asking manufacturers about their top investment priorities revealed inventory management, cloud, big data, CRM, and mobile as the top five.⁴ This highlights a clear move toward digital technologies that provide the level of visibility and insight required to define a data-driven strategic vision, as well as those that enable the collaboration necessary to realize that strategy.

Manufacturers plan to invest in:



⁴ Research conducted by MORAR Consulting, surveying more than 1,800 respondents in 12 countries (MORAR, Growth Survey, 2016)

Invest in the cloud

In particular, interest in cloud-based ERP has soared in recent years, growing from 23 percent to 59 percent between 2009 and 2016—which isn't surprising since cloud-based technologies are a powerful enabler of companywide collaboration.⁵

While on-premises ERP systems enable management of complex orders and raw materials inventory, cloud-based systems can enhance real-time visibility into customer orders, supplier performance, and multisite manufacturing operations. Moving systems to the cloud helps simplify and expedite collaboration—giving your employees access to the information they need to do their jobs at any time, in any place, from any compatible/supported device. Cloud-based technologies also allow you to extend collaboration upstream to suppliers or downstream to customers.



Manufacturers cited better technology (47%), better planning (47%), and more efficient working (42%) as the three most important factors to overcome the challenges of business growth.⁶

74% of best-in-class companies have implemented an ERP solution to enable digital transformation.⁷

⁵ "What Does Digitalization in Manufacturing Mean Now?", Greg Cline, Aberdeen Group, 2017

⁶ MORAR, Growth Survey, 2017 (see footnote 1)

⁷ "Don't Be Left Behind: The Time for Digital Transformation Is Now," Nick Castellina, Aberdeen Group, 2015



Turn Insight Into Action

Investing in technology alone isn't enough to drive digital transformation. You need the people, processes, and culture to empower your business and foster change. You need to identify opportunities both within and outside your organization, and you need an unwavering focus on the customer. We call this having the ability to "act for growth."

Right people, right culture

To realize your digital transformation strategy, you need individuals who embrace change and are committed to realizing that vision. Leaders and employees must create a culture conducive to change. Align new technologies with a clear transformation strategy and take steps from the start to communicate your vision and gain employee buy-in. How you manage change is critical—and you should ensure you

have leaders with the right mindset and capabilities to lead this transformational change.

What's more, you need to consider the strengths and weaknesses of your current staff. Do they possess the skills to follow through on your digital strategy? Do you need staff with different skills, and will you need to recruit or train them?

Industrial machinery manufacturers are looking more and more towards the next-generation workforce—those who recognize where the industry is headed and possess the skills to manage and leverage innovative technologies, cloud-based solutions, and mobile working. Alternatively, you need to consider the cost of training existing employees to develop a digitally enabled workforce.

High-growth companies are more than 1.5 times more likely than their low-growth counterparts to feel that recruiting and retaining young talent is important for long-term growth.⁸

High-growth companies are almost three times more likely than their low-growth counterparts to regard IT investment as a high priority.⁸

High-growth businesses are 1.5 times more likely than their low-growth counterparts to look to geographic expansion to drive growth.⁸

Focus outside the business

Gaining operational efficiencies and expanding core competencies are great starting points for digital transformation. However, true growth is only realized when competency meets market opportunity. While low-growth companies will take comfort in inward-looking cost savings, high-growth manufacturers focus outside the business. The right ERP solution incorporates advanced analytics to provide an ideal platform for identifying new external growth opportunities—whether that means increasing your ability to meet niche product requirements, expanding into new markets, or providing new services.

Focus with insight

Data without insight isn't useful. You need actionable business intelligence and complete visibility of your business operations to achieve growth. The ability to act for growth and take advantage of market opportunities will depend on your accurate application of business insight.

The Aberdeen Group reports that best-in-class manufacturers are five times more likely than others to synthesize information from multiple fast-changing data sources.⁹ The right ERP solution can help you do this, giving you visibility and insight across the value chain. Industrial machinery manufacturers that successfully achieve their vision for digital transformation will be those using such technology to ask the right questions and make faster, smarter decisions to drive innovation and business growth.

Focus on the customer

With customer expectations higher than ever before, the onus is on industrial machinery manufacturers to step up and become even more customer-focused in the design of their systems and processes. The ability to deliver short, high-value production runs in a timely way and provide customers with a seamless, transparent, and tailored experience will separate the market leaders from the rest of the pack.

The right ERP solution gives you the visibility to do this, from more responsive and accurate quoting to efficient delivery of products that meet customers' specifications and comply with standards. When you go further to integrate ERP with IoT technologies—RFID, sensors, GPS tracking, wireless communication—you can extend your value-chain visibility and customer responsiveness even more.

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⁸ MORAR, Growth Survey, 2017 (see footnote 1)

⁹ "What Does Digitalization in Manufacturing Mean Now?", Greg Cline, Aberdeen Group, 2017

Get Set for Growth With Epicor ERP

Once you have a clear strategy, understand your path for achieving growth, and have the people and technologies in place to support digital transformation, what's next?

Epicor has the industry-specific experience, expertise, and systems to make your vision a reality. Whatever the shape of your industrial machinery manufacturing business—and wherever you are on your digital transformation journey—Epicor ERP can help you move forward with confidence.

We help you define your digital strategy

At Epicor, we have partnered with manufacturers for more than 45 years, and our consultants leverage that experience and knowledge to help industrial machinery manufacturers such as yours to grow. Once you have established your company's needs and priorities, we can help you define a clear strategy and a practical roadmap for digital transformation—with ongoing education, training, and support to implement that strategy and realize growth for your business.

We give you real-time visibility

Epicor offers a unified ERP suite that provides real-time data, integrated analytics, reporting, and personalized dashboards—enabling you to make faster, smarter business decisions. With centralized visibility, global connectivity, and an open API, Epicor ERP enables you to combine actionable insight with Industry 4.0 technologies to realize the true power of your data.



We're leaders in cloud collaboration

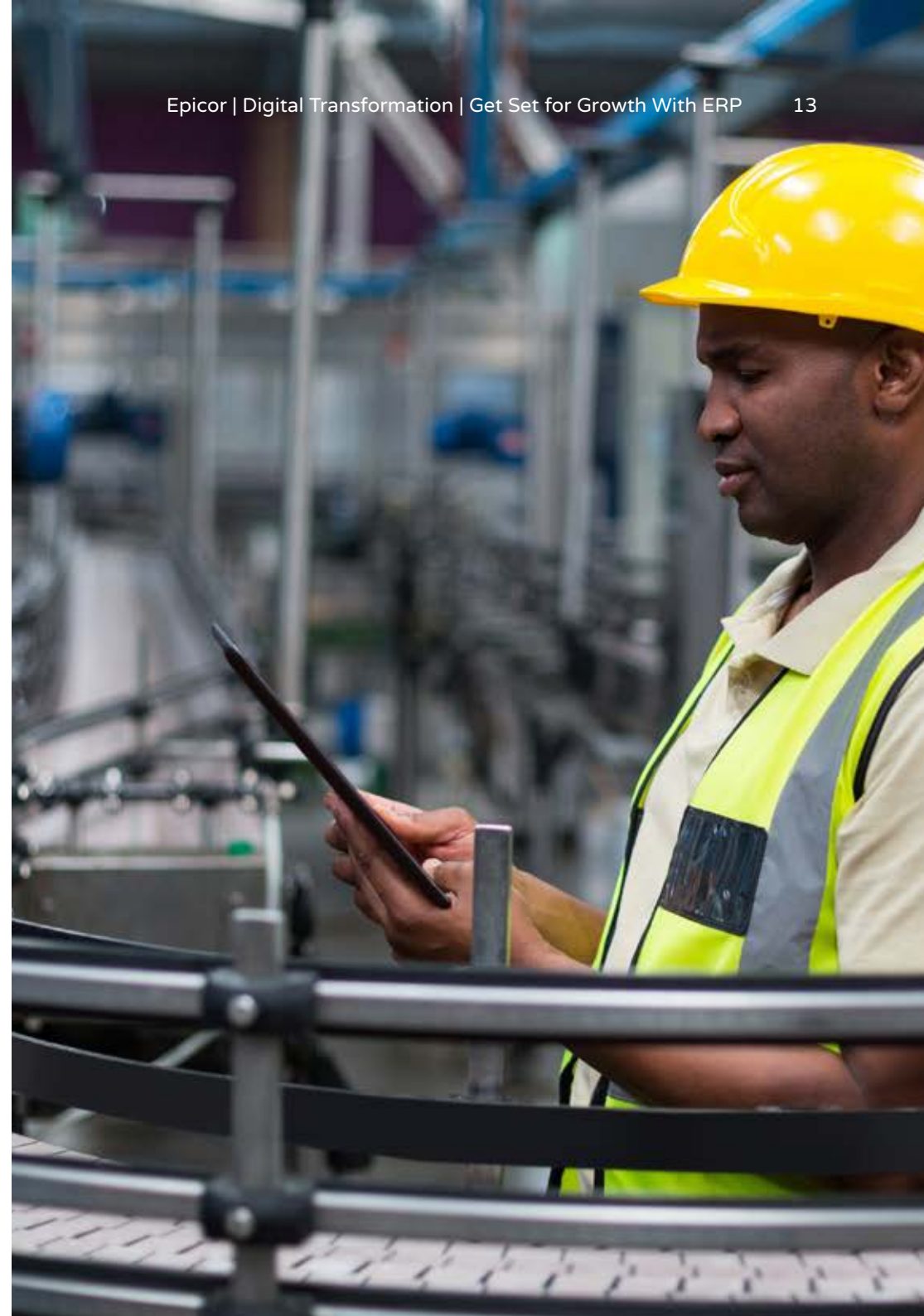
Market-leading cloud capabilities set Epicor apart from other ERP providers—you get the same rich functionality with our cloud deployments as you do when you deploy on premises.

Alternatively, choose an on-premises model now, and be confident that you'll lose nothing by moving to the cloud later. Either way, with a single, unified solution and a range of function-specific add-ons, you can implement new technologies—like mobile, social, IoT, and 3D printing—as you transform your business.

We're ready for the future

Finally, Epicor ERP is designed to scale with your business. We understand that digital transformation looks different for every industrial machinery manufacturing business, so we give you the platform you need to accelerate growth, with scope to add more services or features as your needs evolve.

Whatever growth means for your business, Epicor can help you turn digital transformation into a set of achievable, growth-focused goals—improving productivity, creating more profitable customer relationships, and eliminating unnecessary operational complexity.



How These Grow Getters Made Digital Transformation Work

The industrial machinery manufacturers forging ahead are those with a strong vision of where digital transformation needs to take them. They invest in the right systems and technologies, rethink ways of working, and build a culture conducive to growth—all with the customer in mind.

These manufacturers are the Grow Getters™—they understand why transformation is essential for growth and have the vision and drive to see it through.

Grow Getters share a set of core characteristics and values. They believe in planning and have an unswerving focus on the customer. They have the complete picture of the internal, external, and technological factors that affect their business. They have a clear growth strategy, and they're taking action.



Grow Getters focus on the customer¹⁰

By developing a clear customer-focused transformation strategy and choosing an ERP partner that understands their industry, industrial machinery manufacturers are forging ahead with business growth.

“In our experience, customers these days definitely look at other values besides just cost when choosing their suppliers, and for us, modern technology is one of the keys to becoming more efficient and helping us go above and beyond competing solely on price.”

—Tim Berryman, IT Manager | Guttridge Ltd

Grow Getters invest where it counts¹⁰

Epicor ERP allows you to introduce incremental change, giving priority to those areas of your business that afford the quickest return on investment.

“Through Epicor, we’ve tried to make our operations as lean as possible. The system has been especially effective for helping to schedule shop orders, manage plant flow, and monitor customer and production demands.”

—Rick Howard, Plant Manager | Card-Monroe Corp.

Grow Getters demand a quick return from IT spend¹⁰

“I have great confidence that the implementation of Epicor ERP will boost production. Of all the advantages the Epicor system brings, what really stands out is how user-friendly it is.”

—Jun-Hyuk Lee, Executive Vice President | Keumyong Machinery

Grow Getters turn information into insight, and insight into action¹⁰

Epicor ERP customers can react quickly to changes in the business landscape, with the agility and visibility to make effective decisions.

“We know that the data is accurate and the reports are correct. We can call on the Epicor system to support our decision-making process and let us make decisions faster and justify our spend.”

—Keng Foon Leong, General Manager
Welding Industries Malaysia



¹⁰ MORAR, Growth Survey, 2016 (see footnote 4)

Next Steps

Our ERP technology is already driving digital transformation and growth for thousands of companies across the globe.

We're here to support you each step of the way—helping to define your transformation roadmap, ensuring a successful ERP implementation, and partnering with you to make sure you derive value and growth from our technology. It starts with a conversation.

About Epicor

Epicor Software Corporation drives business growth. We provide flexible, industry-specific software designed to fit the precise needs of our manufacturing, distribution, retail, and service industry customers. More than 45 years of experience with our customers' unique business processes and operational requirements are built into every solution—in the cloud or on premises. With this deep understanding of your industry, Epicor solutions dramatically improve performance and profitability while easing complexity so you can focus on growth.

For more information, [connect with Epicor](#) or visit www.epicor.com.



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