

CREATE VALUE & THRIVE IN THE AI ERA:

4 Right-Now Strategies for

Manufacturers & *Distributors*

2025

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01

PART ONE

The New AI Era in M&D

There's a *Massive* Opportunity if You Act Now

Manufacturing and distribution (M&D) is experiencing a surge of revitalization as companies reshore and government incentives spur new growth.

The U.S. smart manufacturing market is expected to expand from

\$66.18
BILLION
IN 2023

TO

\$145.57
BILLION
BY 2030

A COMPOUND ANNUAL
GROWTH RATE (CAGR) OF

11.9%ⁱ

WHILE THE **GLOBAL MARKET IS**
PREDICTED TO ACHIEVE A CAGR OF

16%

BY 2034

The [Infrastructure Investment and Jobs Act of 2021](#) and the [Inflation Reduction Act of 2022](#) have spurred a resurgence in domestic production and new manufacturing expansions. These laws, along with the continuing effects of [Sections 232 and 301 tariffs](#) and the burgeoning need to support generative artificial intelligence (AI) infrastructure demands, have manufacturers rethinking their strategies, locations and potential. It's time to reimagine what's possible for your future.

If you want to capture your share (or more) of the coming gains and compete, you must wrap your head around what it takes to go from where you are now to where you need to be. You'll need to shift your mindset, be open to doing things differently and lean on strategic advisors to transform.

None of this is easy. It requires effort, investment and smarts — and all of it is possible.

What's It Costing You to *Not Change*?

Remaining in the status quo with your tech may feel comfortable. **But it's likely costing you via:**

- ✓ Slower revenue growth
- ✓ Decreased operational efficiency
- ✓ Increased risk of disruption
- ✓ Higher risk of losing key personnel
- ✓ Inadequate inventory levels due to outdated forecasting & planning
- ✓ Greater chance of downtime
- ✓ Opportunities lost to more modern competitors

What Does It Take to Get There?

Manufacturers have been adopting Industry 4.0 (smart manufacturing) over the last decade. It prioritizes automation, advanced robotics, the internet of things (IoT), 3D printing and streamlining productivity and efficiency. The pandemic interrupted that progress for many companies while spurring others to leapfrog forward.

During the last few years, Industry 5.0 has emerged. This next phase of transformation reintroduces the value of people – particularly human and machine collaboration – along with sustainability and eco-friendly operations. It converges with the era of AI and growing sustainability regulations. Industry 5.0 takes smart manufacturing to the next level, where companies will need to be to stay relevant in the evolving supply chain ecosystem.

The bottom line? We're in the midst of a technological and industrial revolution that's fundamentally changing how work (and life) gets done. Companies that recognize this, accept it and *take action* will win. Those who hesitate or remain in denial may very well not exist in five years. You can't afford to delay change.

AI is No Longer a Nice to Have, *It's a Must*

Artificial intelligence encompasses multiple types of technology, including robotic process automation, machine learning, and large language models. Innovative AI capabilities emerge every day within technology that already exists, as well as stand-alone applications. In manufacturing, AI's value can be found via applications that drive improvements such as predictive maintenance, improved purchasing through AI-guided negotiations and tools for shopfloor training such as chat-based training or digital twins.

Now, generative AI is once again changing the work environment. GenAI is based on large learning models (LLMs) trained on massive amounts of internet data. It has the capacity to generate outcomes and streamline processes in mere seconds, including automating and performing manufacturing functions faster than humans can.

This newest form of AI is set to reshape aspects of manufacturing that have so far not been impacted by automation (like back-end office work) while also improving AI's current functions.

Not since the advent of the internet in the early 1990s have we seen such a fundamental change in how technology is reinventing work. Imagine being back in that era and deciding that you don't need the internet in your business. Can you imagine not using the internet today? AI is on par with this change.



**Adopting AI is
not *optional*;**

**The only question is, when, where
and how will you do so?**

The stakes are high

In our consulting with manufacturers, we're seeing three camps: those who realize the strategic (if not existential) importance of adopting AI tools, those who don't take this change seriously enough and believe they can get by without it, and those who just don't see how it will impact their business.

Without AI, there is a high probability that your company will not be competitive in a few short years. Future-minded businesses in every industry are adopting AI today. The global AI in manufacturing market is expected to grow from \$5.12 billion in 2024 to a staggering \$132.54 billion by 2034.ⁱⁱⁱ

After deploying AI technology, manufacturers report:

72% saw reduced costs and improved operational efficiency^{iv}

51% improved operational visibility and responsiveness^v

41% had improved process optimization and control^{vi}

The good news is that you don't have to adopt AI en masse, all at once. You can start with small steps that make sense for you, and that will benefit you immediately while your teams learn how to use this new technology and learn fundamentally new capabilities, like how to identify processes that can be automated.

You Have a Lot on Your Plate (and That's Saying It Politely)

Globally and within the U.S., many organizations are still under significant macro-economic pressures: supply chain disruptions, high inflation, labor shortages and geopolitical instability. These are compounded by heightened cybersecurity risks, impending baby boomer retirements, poor data quality, tariff considerations and aging technology.

Steering a manufacturing or distribution company through these waters takes determination and ingenuity. Agile leaders will need to encourage the entire organization to think differently to tap into AI's full potential.





Change is hard, and you must be prepared to face resistance:

“**That’s the way we’ve *always* done things.**”

Many leaders are hesitant to change core aspects of the business because what has worked in the past feels safe and avoids risk. It can be hard to see the ROI of investing in change when the current way of working is getting results. But what feels safe now can actually be putting you at risk.

“We’ll leave the future to the next generation.”

This can be tempting when retirement or an exit is near, but as a leader today, what responsibility do you have to lay the foundation for tomorrow’s strategic success? What will it cost the business if you don’t? Could the “next generation” be given the opportunity to start changing now?

“Our customers value the way we do business now.”

Customers value outcomes and relationships. Transformation must include change management — a process of planned communication and support that guides your customers through what’s changing, why it’s changing, the benefits they’ll see and feedback opportunities. When they see the value, they’ll embrace it, too.

“We don’t have the resources or people.”

Change can be structured in increments. Some transformation may require reallocating budget, hiring new skill sets and investing in infrastructure and technology. A business advisor can help you decide cadence and where to start, and guide you toward success.

“We’re too busy to deal with this now.”

Keeping a business running while driving transformation is challenging and possible. Bringing in external support can help lift the burden off busy teams.

02

PART TWO

4 Ways to Drive Immediate Impact

Boost Revenue and Initiate Change

Here are some actionable projects you can implement right away.

These will have an immediate impact while initiating the longer-term change process. Many of these recommendations introduce AI-enabled processes to help your organization experience AI's capabilities.

One key to lasting transformation is to start small. Go for easy wins that solve real business problems, then build on those successes over time. By freeing up existing capital within your business, you create space for possibility.

1

Uncover Hidden Cash Flow

Cash can get stuck in various parts of your operations. Siloed systems, manual processes, human errors and the simple fact that things get overlooked when there's not enough time in the day to get everything done — all contribute to the cash cycle being sub-optimized. Whether that is because cash is locked up in inventory, money isn't coming in fast enough due to a slow collections process, or there are missed discounts in payables, getting visibility into what's influencing the overall cash cycle is critical.

One of the best ways to swiftly generate more working capital is to find hidden cash in your operations. Here's how:

Leverage a 13-week cash flow analysis to see your cash flow.

If you can't see the daily sources and uses of your cash flow, you can't make good business decisions. If your team is doing a manual cash flow model, it's likely moving slower than your business needs. With AI, you can create a rolling 13-week cash flow model that processes and classifies thousands of cash transactions in minutes. This enables you to always know your real cash balance. Using this real-time analysis, you'll be able to identify emerging cash flow challenges, align stakeholders, gain a granular understanding of financials and uncover areas where you can prioritize cash outflow and collections.

Audit contract terms and unused discounts.

You can leave a surprising amount of money on the table when you don't keep close tabs on your third-party contracts. Conducting an objective [audit of contract terms](#) is an effective way to see if your vendors and other key business partners are meeting expectations. If they're not, they may owe you money. A contract audit will identify areas of non-compliance, quantify the amount owed and suggest ways to improve the current agreement moving forward.

Optimize payment terms in your favor. For example, you can set up a quick-pay discount: if your accounts payable meets a faster payment deadline, your company gets a discount. If discounts aren't possible, negotiate longer terms, like 60 days, to improve cash flow.

If you have a most-favored customer clause, there may be opportunity to recover real value if an audit shows that suppliers aren't giving you the best price as promised. If the contract has not been audited in a few years, you typically may be able to recover 2-4% of retroactive spend. Be sure you are actually getting the best price and the supplier is not using product customization or similar methods to wiggle out of it.

An AI auditing tool can evaluate contract terms and identify areas for optimization within minutes, rather than days. It can also assist in auditing contract compliance to spot areas where you're missing out on cash.

Be sure someone is managing and tracking collections from missed payment terms or contract non-compliance. This can easily be optimized through AI.

Improve demand forecasting.

For many manufacturers, demand forecasting relies on historical data and trends. With AI-enabled demand forecasting software, you get real-time insights to inform your cash management process. This creates a highly accurate forecast that improves inventory and production levels. The closer you can get demand forecasting to reality, the more precise your cash management will become.





2

Close These Key Workforce Gaps

In the U.S. today, nearly 13 million employees work in manufacturing^{vii}. It's estimated that nearly 1 million manufacturing employees will leave annually in the next decade primarily due to retirement^{viii}. There are concerns that unless the industry revamps its appeal to younger workers, and addresses its skill gaps, it may be hard to fill these roles.

Manufacturers are partnering with higher education and trade schools to train, intern and hire new graduates. Generation Z is showing higher interest in trade professions than other generations. But none of these are fast solutions to a gap in the workforce today. Far too many mid-market companies are also up against "the Amazon effect." This is the impact felt when Amazon or an equivalent enterprise-level smart factory moves in, and smaller organizations are no longer competitive on wages, schedules or career mobility.



What can you do now to *improve* retention and recruitment?

Give people a reason to care.

Your culture matters. Even if the Amazons of the world move into your area, smaller manufacturers that are open to transformation have advantages. After compensation, one of the best ways you can compete is by building a great culture. If you offer a more personal sense of belonging, connection and are open-minded to perspectives that new generations bring, you can become an employer of choice. We've seen mid-market competitors that do this attract talent that otherwise would have gone to enterprises.

People will leave for better compensation, better work/life fit and better incentives. But they will stay for supportive managers who make them feel valued and appreciated, in jobs that feel fulfilling, and when they feel their team cares. A sense of belonging and connection goes a long way in reducing turnover.

Rethink your teams and training.

You can improve hiring, employee experience and retention by refreshing job descriptions, mapping roles and providing cross training to employees. Evaluating digital fluency is another key to understanding how well your employees use technology and where training and/or hiring gaps may be. Developing cross-functional teams helps protect organizational knowledge from attrition and creates a lateral career path that employees often find attractive.

Automate outside the shop floor.

Industry 4.0 has focused on automating the shopfloor. Now it's time to focus on bringing automation to other areas of the business, including HR and back-office work. Too often, processes are antiquated, and these departments continue to do rote, manual labor. AI and automation can alleviate mundane, time-consuming tasks and free employees to focus on data analysis and better decision-making. There are numerous opportunities to automate HR processes that will free up employees to focus on developing organizational structure and creating strategic hiring campaigns. The industry's labor needs are changing, and your job roles, descriptions and org chart will need to change, too.



3

Do This to Mitigate Supply Chain Risk

You can't control the supply chain, but you can plan for disruption, become more agile and mitigate risk. This often involves proactively diversifying suppliers, vertically integrating and/or creating strategies to be as nimble as possible. Depending on your operating location, you may be required to create sustainability reports to account for your carbon footprint up and downstream. Modern technology and AI make this significantly easier. Here are the most immediate ways you can guard against the challenges of managing your supply chain.

Implement real-time analysis and visibility.

The more you can see across your supply chain ecosystem and your own business, in real time, the more empowered you are to act strategically. Master planning can conduct a risk analysis on every supplier and optimize every order based on risk, margin, delivery, etc.

You can also run capacity planning, forecasting and inventory management in real time. Integrating business applications will help create visibility, as will technology consolidation – where you eliminate having multiple systems and opt for a solution platform that handles enterprise-level capacity for multiple functions. Consolidated systems create a single source of truth for everyone to work from, save time and are cost-effective.

Balance relationships with data.

Manufacturing has become far more data-driven in the last decade. Yet, many organizations are not making the best use of their data to drive impact. AI makes it much easier to understand your data and realize practical insights that can support your business. In fact, when used well, AI tools can provide data insight similar to hiring a data scientist. What used to take days or weeks to compile, AI engines can identify and summarize in minutes. You have the power now to really make your data serve your success.

That said, personal relationships in the supply chain still matter. Automating data with AI frees you to focus on the relationships. During the pandemic, we saw that relationships with suppliers made the difference when trying to get parts.

Improve cost accounting.

Do you know your true product costs? Does your firm spread costs like butter vs. employing driver-based allocations? Many manufacturers struggle with tracking them because they don't understand how to account for costing, research & development and tooling. Plus, manual cost accounting is hard and labor-intensive. Larger companies have teams working on this, but if you don't, you still need to know what things actually cost. This information is important to maintain your margin and competitive standing. Knowing your costs will inform pricing and enhance margin analysis, helping increase profitability. You'll also want to know this when looking at the true costs of offshoring, nearshoring or reshoring. Having an enterprise resource planning system (ERP) can facilitate this faster and with less resources. Or, if you don't have in-house expertise, consider outsourcing your cost accounting.



4

Make Your Data Work Harder

Companies with the most insight into their data will win in the next five years. AI depends on having clean, reliable data to analyze and surface meaningful insights that can inform business decisions. While there are AI use cases you can implement immediately, your larger AI strategy will depend on the quality of your data. To get the most value out of your data, it needs to be easily accessible, integrated across systems with a modernized tech stack.

The benefits of leveraging your data are significant: improved process consistency, better overall equipment effectiveness, less raw material usage, more efficient actions and decisions and higher quality products. This translates into cost savings and improved margins.

It can be hard to prioritize data, but it is essential to do so. Here are ways to get started:

Hire a data consultant.

If you don't have an in-house data expert leading your data management transformation, consider investing in an experienced data consultant. Bringing in outside eyes to see the big picture of the state of your data is valuable. It also frees up your own team to run the business while an independent consultant helps you develop a data strategy. One of the most impactful things you can do for your business is to get your data in order.

Break down data silos.

Data silos represent functional silos, too. Your company needs to be working from a single source of truth. By consolidating and integrating your business applications, you simplify your data and make it easier for everyone to access. AI can automate data and system integrations, which saves IT months of manual labor.

Consolidated data is essential for tax and audits, as well. By integrating data, you'll make reporting easier, saving employees hours of work each month.

Improve cybersecurity.

Manufacturers using IoT and robotic process automation (RPA) need to stay on top of cybersecurity risks and prevention. We see an increasing threat of ransomware attacks on manufacturers, as well as broader threat exposure due to the supply chain ecosystem. A cyberattack can shut down your entire operation, costing you millions and damaging your reputation. Not only are operations at stake, so is your intellectual property.

Beefing up your cybersecurity and data privacy defenses is an important step in safeguarding your profits and mitigating the risk of having to pay out an exponential amount in ransomware or recovery costs.

Which Future Will *You* Choose?

Every business in every industry is grappling with the fact that change is imperative. We are in a new era, and the impact of AI and automation is here to stay. Future-oriented, AI-enabled organizations will take the lead (they're already doing so) and will leave those that fail to transform behind. The opportunities for unprecedented improvements in productivity, efficiency, employee experience and revenue are here now.

Jumpstart your AI-Driven Transformation

You don't have to figure out the right course alone. Armanino helps manufacturing and distribution leaders reimagine their operations, seize opportunities and avoid costly missteps (and headaches) every day. Explore how our [manufacturing experts](#) can help you evaluate the practical impact and advantages of change and determine where and how to begin.

CREATE MORE VALUE

Get Your Complimentary Strategy Session (\$600 Value)

Find out where AI is (and isn't) the best answer and walk away with a customized 30-60-90-day plan to move forward.

REQUEST MY FREE SESSION

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- i <https://www.fortunebusinessinsights.com/u-s-smart-manufacturing-market-107756>
 - ii <https://www.precedenceresearch.com/smart-manufacturing-market>
 - iii <https://finance.yahoo.com/news/global-ai-manufacturing-industry-research-092000135.html>
 - iv <https://nam.org/issues/research-innovation-and-technology/ai/>
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CONTACT US

Email us at:
experts@armanino.com

Visit us online at:
armanino.com

Schedule a call with:
COLIN DOWD
Senior Manager
colin.dowd@armanino.com
314.463.2826

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