How Can Industrials Thrive during Epochal Change?

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The turbulence in the business world has reached such a degree and extent that we can only call the situation epochal. At the same time, the work of industrial companies remains as essential as ever. Industrial companies are at the heart of meeting challenges such as constructing the data centers needed for the AI transformation and modernizing the power grid, to name just two examples.

So far, industrial companies are struggling to cope with an uncertain macroeconomy, volatile tariffs, and the fast-evolving potential of artificial intelligence. As a result, top-line growth and valuations have suffered—for most but not all industrial companies. Taking lessons from the companies and micro-verticals that are prospering despite the challenges, we have developed eight core beliefs that can inform a playbook for success in this time of epochal change.

Epochal Change in the Business Environment

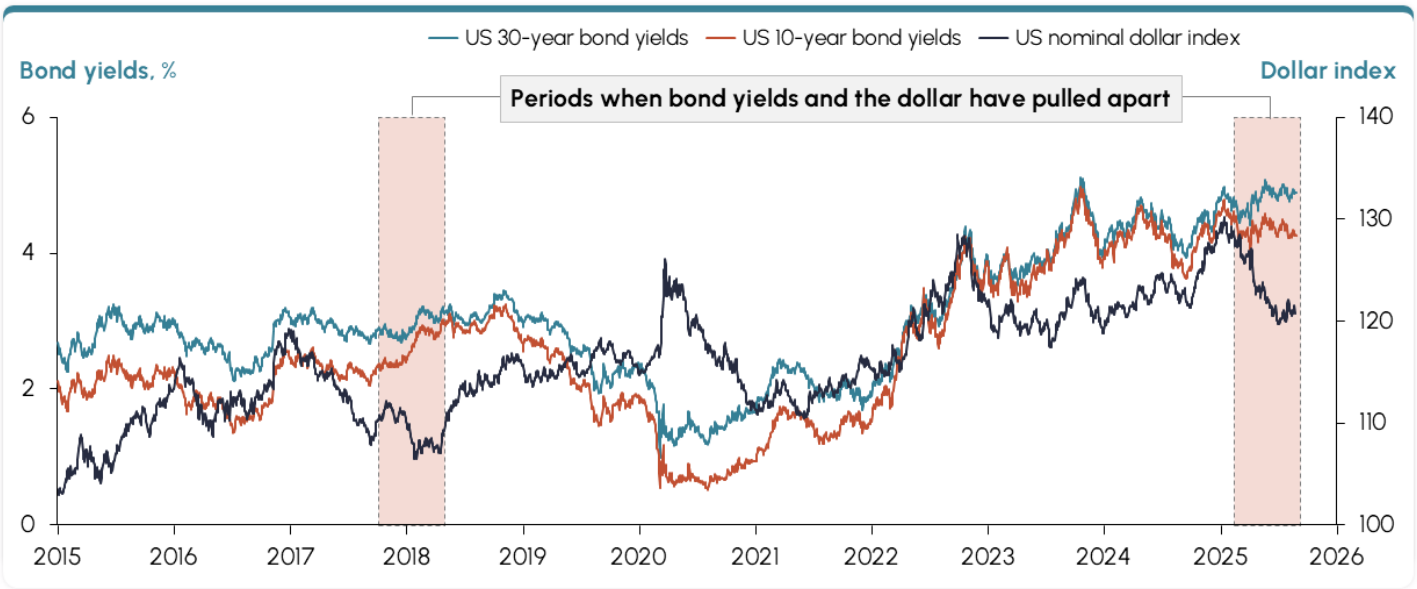
Industrial companies today are experiencing epochal change. The economy is characterized by prolonged uncertainty and subdued confidence. Century-high tariffs are reshaping trade with volatility and scale. And AI has become the economy's new growth engine.

Uncertainty in the Macroeconomy

For the first time since the start of the COVID-19 pandemic, bond yields and the dollar diverged in 2025 (see Exhibit 1). The dollar's value, which had been rising during the second half of 2024, fell to 2023 levels, while 30-year bond yield continued their climb. This pattern is a sign of cracks in confidence in the US macroeconomy. The high-risk premium on holding US debt signals concerns about inflation or fiscal sustainability. The weakening dollar suggests global investors are more hesitant to invest in US assets. Higher yields no longer attract capital inflows, suggesting that investors' faith in US policy has weakened.

Exhibit 1

Bond yields and the dollar are pulling apart for the first time since COVID-19, signaling cracks in US macro confidence



Source: "10-Year Treasury Constant Maturity Rate," Board of Governors of the Federal Reserve System (US), Federal Reserve Bank of St. Louis, September 4, 2025, https://fred.stlouisfed.org/series/DGS10/; "Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis," Board of Governors of the Federal Reserve System, September 4, 2025, https://fred.stlouisfed.org/series/DGS30/; "Nominal Broad U.S. Dollar Index," Board of Governors of the Federal Reserve System, accessed September 4, 2025, https://fred.stlouisfed.org/series/DTWEXBGS/.

Meanwhile, the GDP growth of emerging markets is outpacing that of advanced markets, and the growth gap has widened since COVID. From 2015 to 2021, GDP in emerging markets grew at **3.8%** per year, versus **1.7%** for advanced economies, a difference of 206 basis points. Then, from 2021 to 2025, GDP growth rose to **4.2%** in emerging markets versus **2.0%** in advanced economies, a difference of 225 basis points.[1]

Industrial confidence remains weak. The ISM Manufacturing Index has been below 50 throughout most of 2023–25 and has yet to recover from the inflation shock of 2023. The ISM Manufacturing Index is a monthly diffusion index based on surveys of US manufacturing supply managers, tracking changes in new orders, production, employment, inventories, and supplier deliveries. A reading above 50 indicates expansion; below 50 indicates contraction.

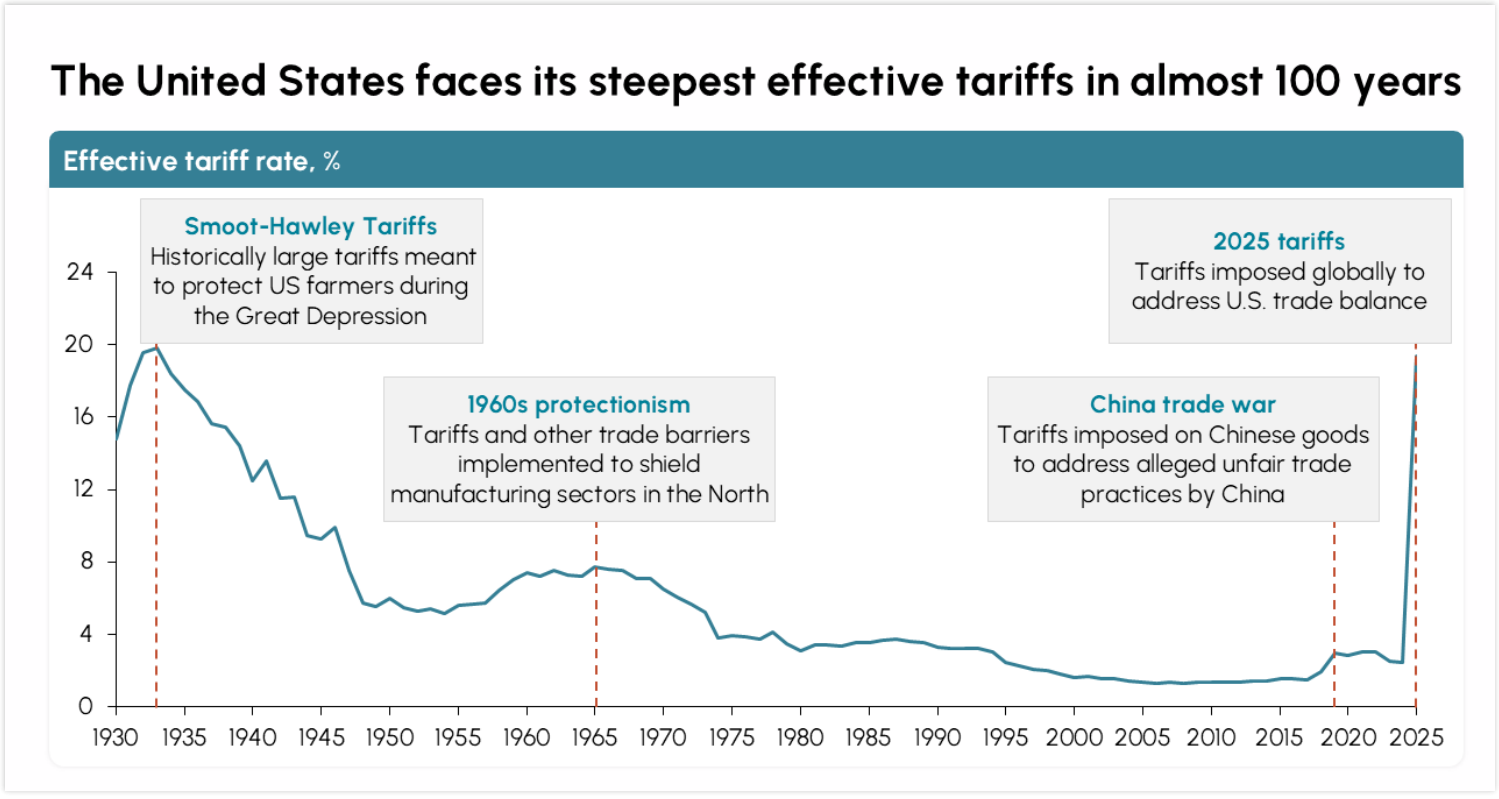
[1] Advanced economies are defined by the International Monetary Fund as the Euro Area, G7, European Union, ASEAN-5, and other high-income-per-capita nations Emerging economies are defined as Emerging and Developing Asia, Emerging and Developing Europe, Latin America, the Middle East and Central Asia, and sub-Saharan Africa. "World Economic Outlook Database - Groups and Aggregates," IMF, April 8, 2023, https://www.imf.org/en/Publications/WEO/weo-database/2023/April/groups-and-aggregates#oae.

Consumer confidence also remains subdued, far below the pre-COVID peak. The OECD's Consumer Confidence Index, which approached 101 in the years leading up the pandemic, is now in the range of 98 to 99, below the long-term average of 100.[2]

Tariffs Reshaping Trade

The US effective tariff rate jumped in 2025 to about 20%, its highest level in almost 100 years (Exhibit 2). The tariffs are likely to further worsen the country's trade deficit, which has averaged around $100 billion since 2021. While tariffs raise import bills, they don't meaningfully shrink the trade deficit—onshoring takes years, trade partners retaliate and weaken U.S. export demand, and companies simply reroute supply chains rather than reduce reliance on foreign goods.

Exhibit 2



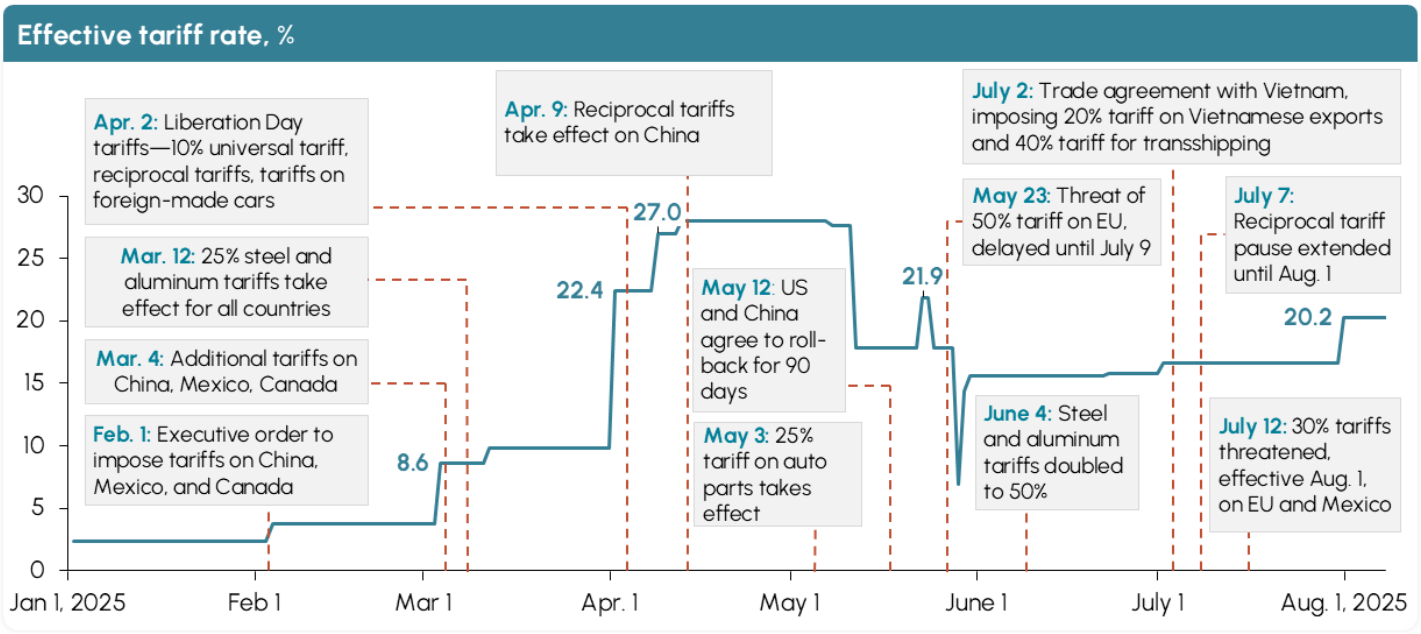
Source: "State of U.S. Tariffs: July 23, 2025," The Budget Lab, Yale University, https://budgetlab.yale.edu/research/state-us-tariffs-july-23-2025.

[2] "Consumer Confidence Index (CCI)," Organisation for Economic Co-operation and Development, 2024, https://www.oecd.org/en/data/indicators/consumer-confidence-index-cci.html.

The imposition of tariffs has been volatile and broad. The effective rate was just over 2% at the start of the year, then rose to 8.6% at the beginning of March and to 27% in April (Exhibit 3). During the summer, the rate mostly remained between 15% and 20%. Trade with all countries—including the key trading partners Canada, China, and Mexico—is affected to some degree by tariffs.

Exhibit 3

The fluid tariff announcements have unsettled trade across partners globally



Source: Elisabeth Buchwald, Rachel Wilson, Amy O'Kruk, and Eleanor Stubbs, "Timeline: What to Know about Trump's Global Tariff Rollout," CNN Business, updated August 8, 2025, https://www.cnn.com/business/tariffs-trump-timeline-dg.

As companies seek to manage tariffs' impact, global supply chains are shifting. In many cases, foreign direct investment (FDI) has been flowing to Vietnam and Mexico where once it was more likely to go to China.

Consumers are experiencing significant price changes. For example, since the 2025 tariff impositions, the price of apparel was up **37%**, leather was up **39%**, textiles up **21%**, vehicles up **12%**, and food more than **3%** as of August 6.[3]

[3] "State of U.S. Tariffs: August 7, 2025," The Budget Lab at Yale, 2025, https://budgetlab.yale.edu/research/state-us-tariffs-august-7-2025.

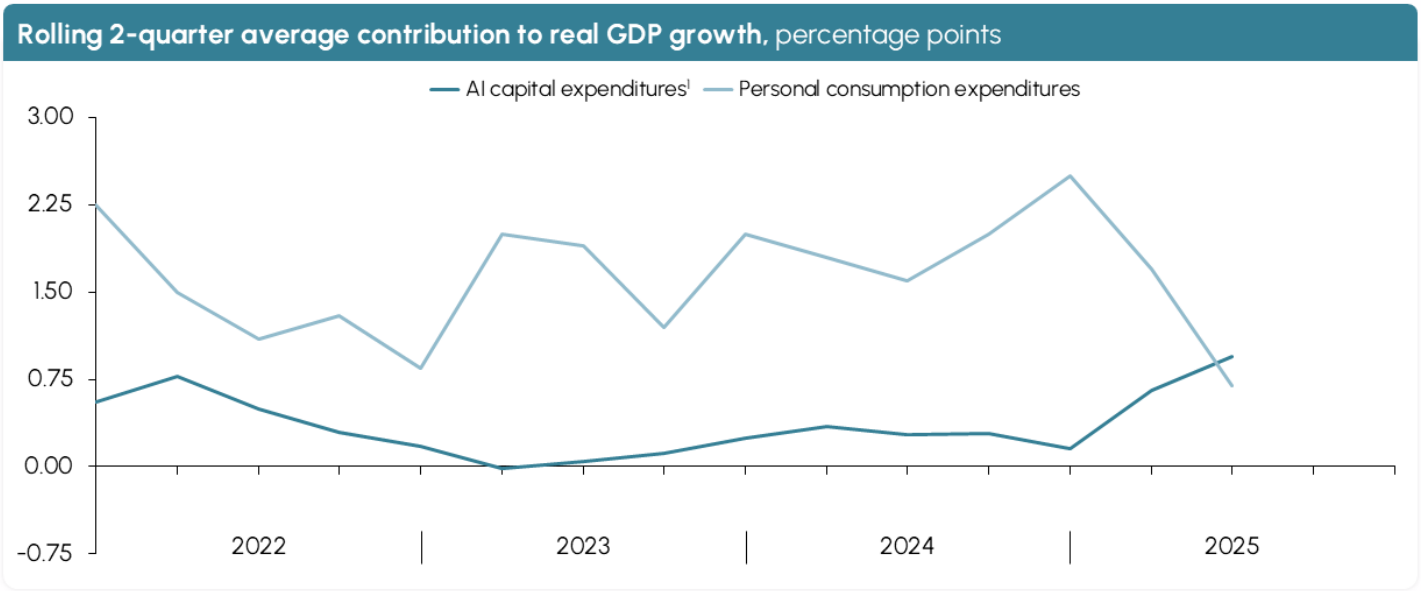
A New Growth Engine: Artificial Intelligence

Capital expenditures related to AI are driving more GDP growth than consumer spending in 2025. During the previous three years, personal consumption expenditures contributed as much as three times more to real GDP growth than the contribution of capital expenditures for information processing and software (Exhibit 4).

But in the first half of 2025, personal consumption's contribution fell dramatically to 0.7% while AI capital expenditures jumped from 0.15% to 0.95% of GDP growth.[4] The tech titans Alphabet, Amazon, Meta, and Microsoft alone invested 10 times more in AI than they did a decade ago.[5]

Exhibit 4

In 2025, AI capital expenditures are powering more GDP growth than consumer spending



[1] Expenditures for information-processing equipment and software, defined as a category within private fixed investment that consists of high-technology assets experiencing rapid technological change.

Source: Bureau of Economic Analysis and Haver Analytics; Renaissance Macro Research Twitter, https://x.com/RenMacLLC/status/1950544075989377196/photo/1.

So far, AI investments are paying off. The 2022–24 shareholder returns of the Mag 7 (Nvidia, Meta, Tesla, Amazon, Google, Apple, and Microsoft) achieved a CAGR of **61%**, four times the rate for NASDAQ returns.

[4] Bureau of Economic Analysis/Haver Analytics; Renaissance Macro Research Twitter, https://x.com/RenMacLLC/status/1950544075989377196/photo/1.

[5] Jack Bowman, "AI Is Becoming the Economy," Seeking Alpha, August 18, 2025, https://seekingalpha.com/article/4814407-ai-becoming-the-economy.

Weak Responses from the Industrial Sector

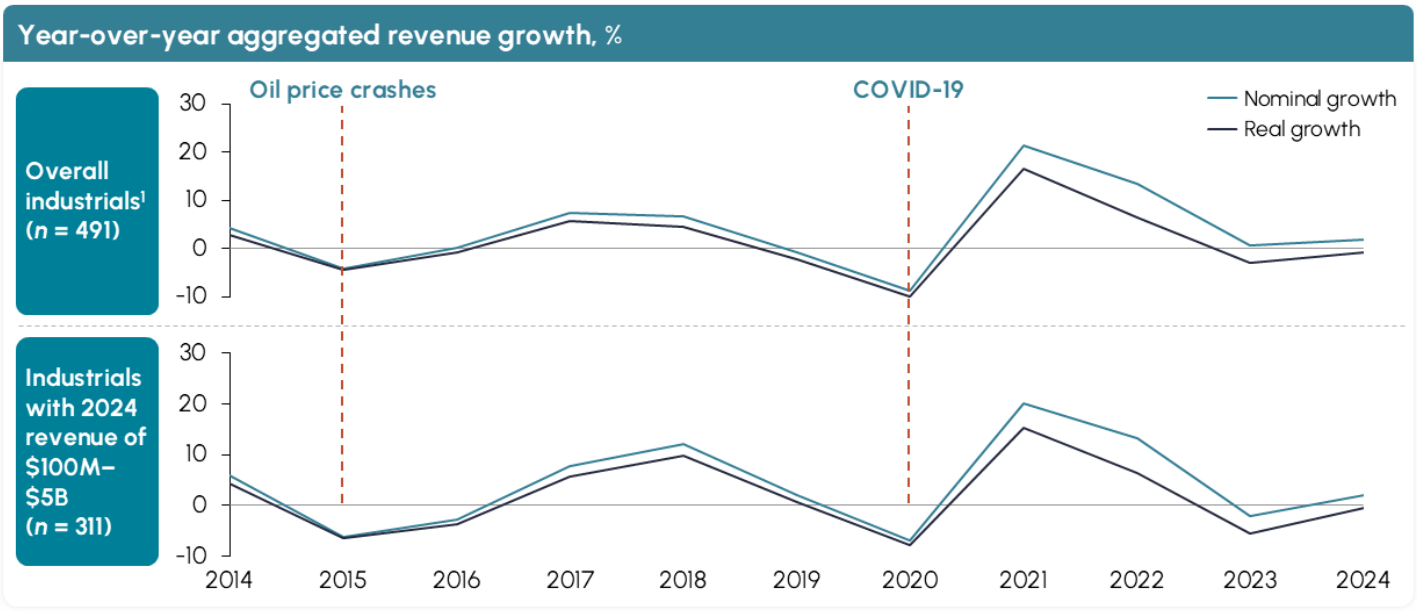
How are industrials responding? We find stalled growth, tariffs driving quick fix like price hikes, and mid-pack maturity of AI adoption failing to lift productivity.

Stalled Growth

Industrials growth stalled. The sector experienced year-over-year real growth of −1%—the slowest in a decade outside the 2015 oil price crash and COVID pandemic. Industrials are stuck in a slow-growth rut (Exhibit 5). The relatively small industrial companies (those with revenue between $100 million and $5 billion), which make up roughly three-fifths of publicly traded industrial companies, are no exception.

Exhibit 5

Industrials, including companies with revenues under $5 billion, are stuck in a slow-growth rut



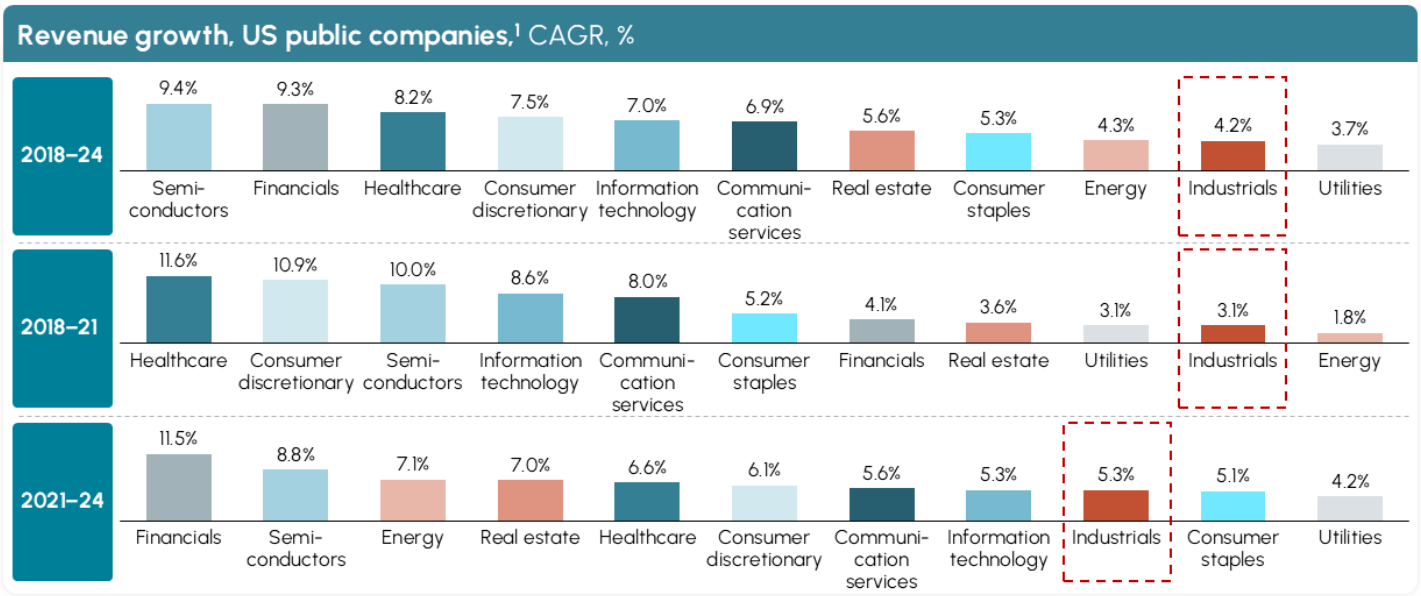
[1] Excludes semiconductors and industrial services; includes companies with revenue >$100 million and complete financial information for 2013–24.

Source: FactSet; Ayna team analysis.

Not only has the growth been slow, but the industrial sector also has been near the bottom of the pack of key US business sectors during the last six years. The six-year revenue CAGR was just 4.2%, ahead of only utilities, at 3.7% (Exhibit 6). The past three years brought industrials a 200-basis-point lift in revenue growth, from 3.1% for 2018–21 to 5.3% for 2021–24, but even for that period, industrials still trailed most other sectors.

Exhibit 6

On revenue growth, the industrial sector has been stuck near the bottom of US sectors, despite a 220-basis-point lift in 2021–24



[1] Includes companies with revenue >$100 million and complete financial information for 2018–24. Industrials excludes semiconductors and industrial services.

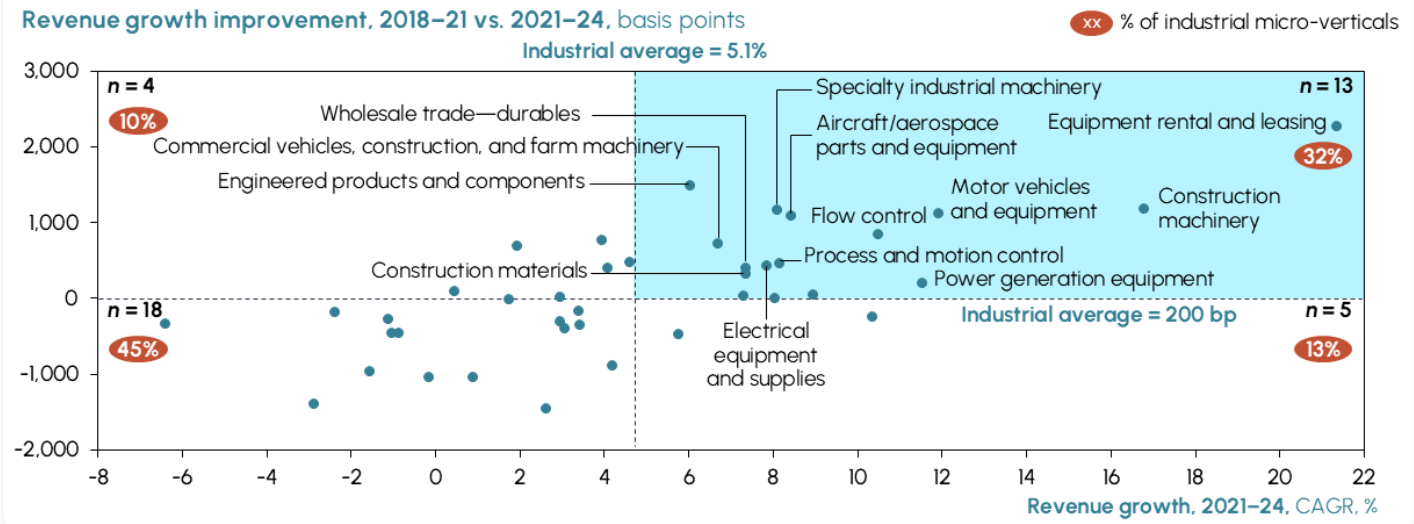
Source: FactSet; Ayna team analysis.

Still, we found micro-verticals that haven't stalled. We compared the 2021–24 revenue growth of 40 micro-verticals and their improvement in revenue growth from the previous three years. Among these micro-verticals, 32% broke out of the pack, with revenue growth and growth improvement above the average for industrials as a whole (Exhibit 7).

Exhibit 7

One-third of industrial micro-verticals broke out of the pack to deliver above-sector growth and improvement in 2021 to 2024

Growth performance of 40 industrial micro-verticals[1]



[1] Micro-verticals with at least 3 companies, each with revenue >$100 million and complete financial information for 2018–24.

Source: FactSet; Ayna team analysis.

These companies' superior growth benefited from policy tailwinds (public spending on infrastructure), the boom in AI and data center construction, or both (see Table 1).

Table 1

Policy and Market Tailwinds Affecting Industrial Micro-Verticals

Micro-Vertical	Policy Tailwinds	Market Demand
Aircraft/aerospace parts and equipment	Global defense budget increase	Commercial aviation recovery
Motor vehicles and equipment		Shift to electric vehicles
Commercial vehicles, construction, and farm machinery	Infrastructure spending	
Construction materials	Infrastructure spending	Repair and remodel activity
Electrical equipment and supplies	Infrastructure spending	AI/data center boom
Power generation equipment	Infrastructure spending; energy transition	AI/data center boom
Flow control	Infrastructure spending; energy transition	Liquified natural gas (LNG) megacycle
Specialty instrument machinery	Infrastructure spending	
Process and motion control	Infrastructure spending; defense budget increase	
Engineered products and components	Infrastructure spending	Commercial aviation recovery
Wholesale trade: Durable goods	Infrastructure spending	AI/data center boom
Construction machinery	Infrastructure spending	AI/data center boom
Equipment rental and leasing	Infrastructure spending	Shift toward rental model

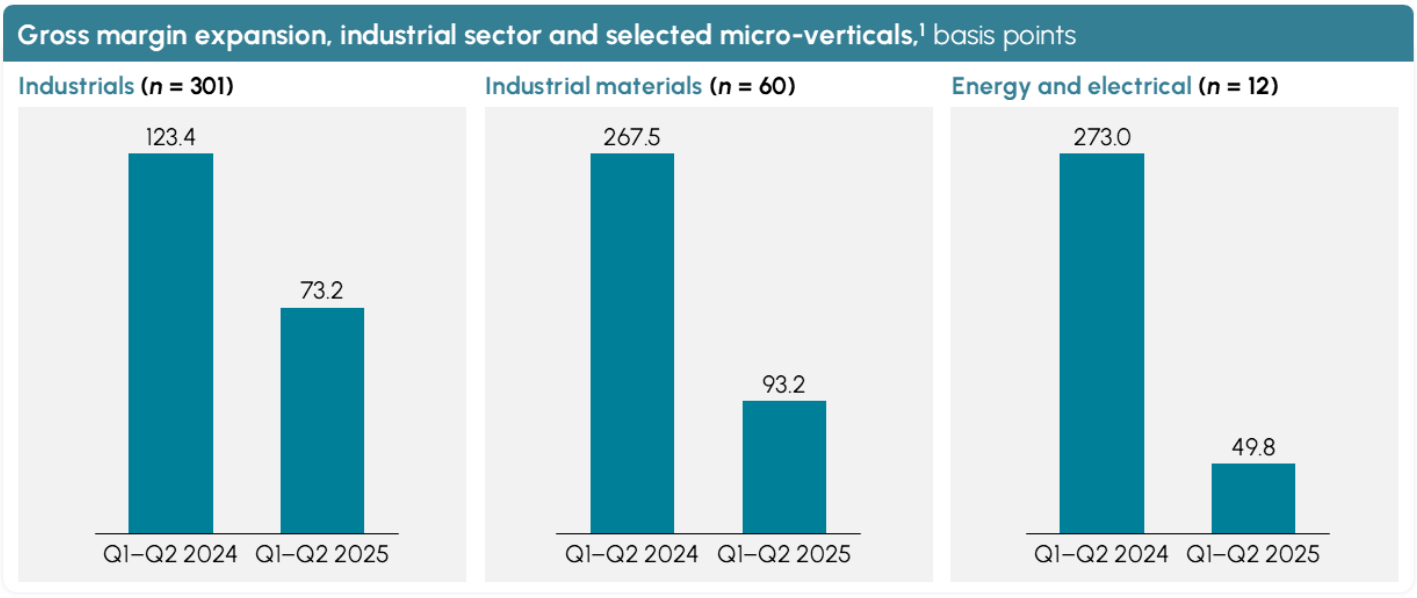
Source: Earnings transcripts.

Overreliance on Price Hikes

The industrial sector's most popular response to tariffs has so far been price hikes. Most S5C industrials have leaned on price increases to offset tariffs. However, margin growth is muted. Tariffs have subdued gross margin gains from the first two quarters of this year to the same quarters last year. Among sub–$5 billion industrial companies, gross margin expansion from the first to the second quarter of 2024 was 123.4 basis points versus just 73.2 basis points for the first to second quarter of 2025 (Exhibit 8).

Exhibit 8

Price hikes alone won't be a sufficient response to tariffs, which have already eaten into gross margins



[1] Including companies with revenue >$100 million and <$5 billion; excluding semiconductors, industrial services, and companies that have not reported Q2 2025 earnings.

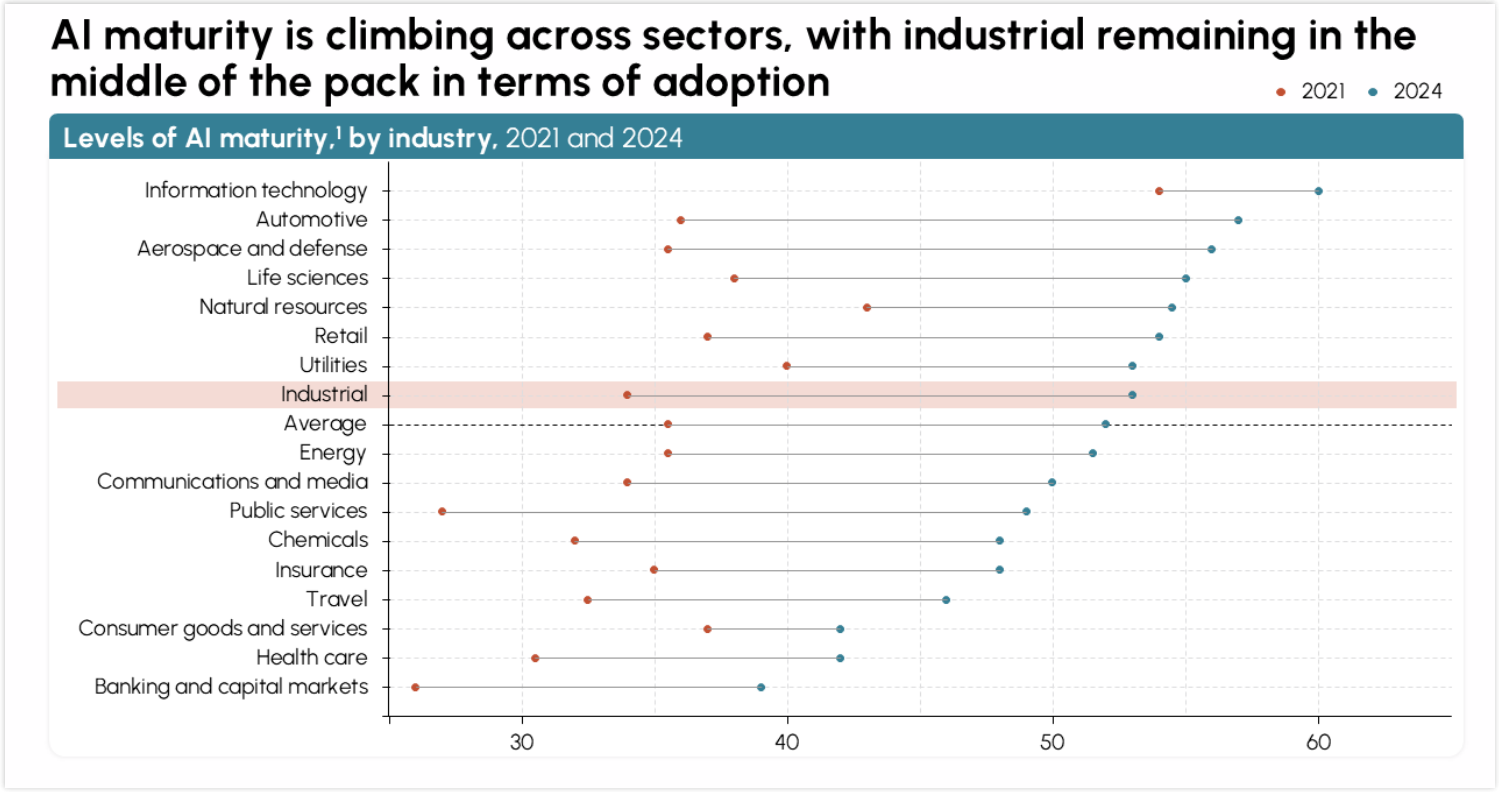
Source: Earnings Transcripts; FactSet; Ayna team analysis.

Unfortunately, a short-term fix won't cut it. The input cost swings from the post-pandemic cost inflation hit margins in key micro-verticals like building products, construction materials, and manufacturing equipment. This time, the tariff shock demands a long-term strategy.

Limited Adoption of AI

AI maturity is climbing across sectors, but the industrial sector remains in the middle of the pack in terms of adoption—not strategic yet (Exhibit 9). For instance, only about 30% of sub–$5B companies have strategic digital leaders reporting to the CEO. Examples of these companies include AAR, Curtiss-Wright, Gibraltar Industries, ITT, and Zebra.

Exhibit 9



[1] Median AI maturity (0–100) defined as the arithmetic average of foundation index and differentiation index.

Source: Tatsiana Isakova, "AI Adoption by Industry in 2024," InData Labs, Jan. 23, 2024, https://indatalabs.com/blog/ai-adoption-by-industry.

The Consequences

As a result, industrials have hit a productivity stall. The industrial sector is the only one where headcount is rising faster than productivity in the AI era (Table 2).

Table 2

Industrials and Other Sectors' Productivity, Head Count, and Revenue Growth

Sector	Productivity Growth, sales/employee, 2-year CAGR, %	Head Count Growth, number of employees, 2-year CAGR, %	Revenue Growth, 2-year CAGR, %
Industrials	0.6	1.1	1.7
Information technology	3.4	0.3	3.7
Consumer discretionary	4.2	1.1	5.3
Consumer staples	4.8	-1.6	3.1
Health care	7.1	0.4	7.6
Communication services	8.5	-3.2	5.0
Semiconductors	11.4	-1.3	9.9
Financial	16.8	0.6	17.5
Overall	**4.2**	**0.4**	**4.6**

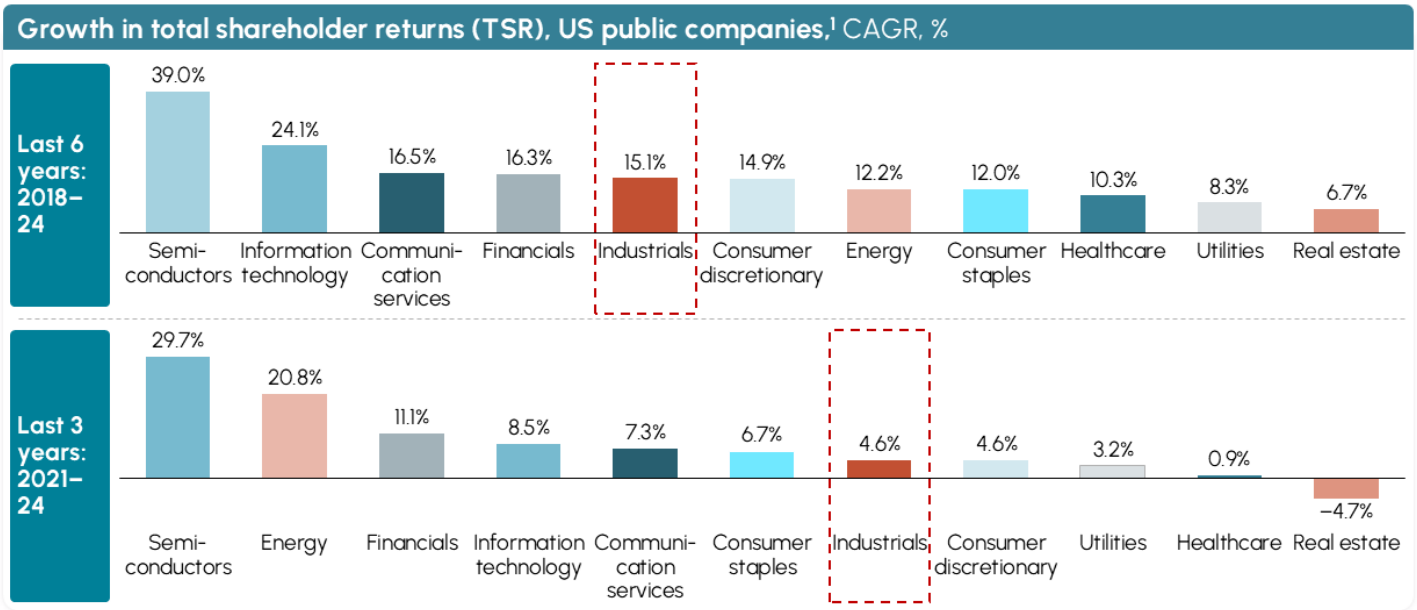
Notes: Only includes companies with revenue >$100 million and complete financial information for 2021-24.

Source: FactSet; Ayna analysis.

Companies' weak response to the disruptions has resulted in shareholder returns taking a hit, especially in the last three years. Whereas the six-year CAGR for industrials TSR was 15.1% for 2018–24, the three-year CAGR for 2021–24 was only 4.6%, dropping industrials two places relative to other sectors (Exhibit 10).

Exhibit 10

Given the sector's weak response to disruptions, shareholder returns have taken a hit, especially in the last three years



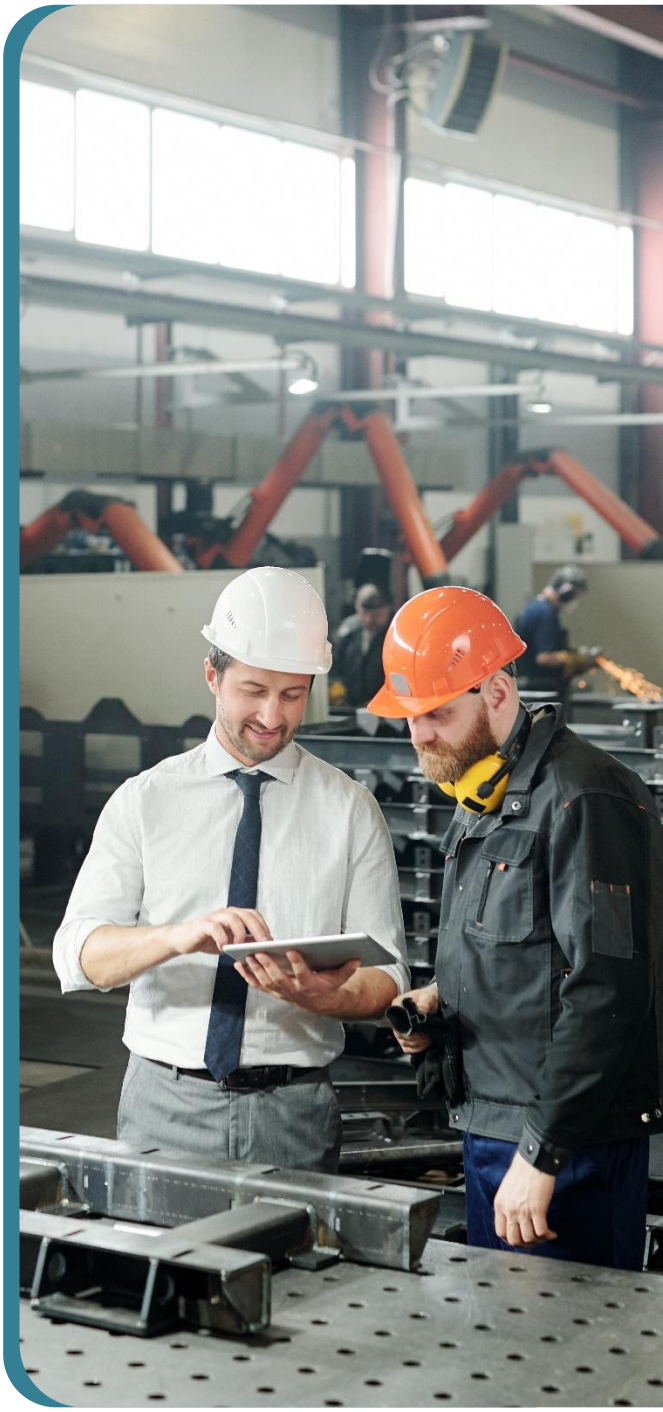
[1] Includes companies with revenue >$100 million and complete financial information for 2021–24.

Source: FactSet; Ayna team analysis.

Eight Core Beliefs for Value Creation

Industrial companies are facing stalled growth, tariff shocks, and only modest gains from AI—yet a subset of firms and micro-verticals continue to outperform. To understand what separates these leaders from the pack, we analyzed their performance patterns and paired those findings with the macro forces reshaping the sector. From this, we distilled eight core beliefs that define how value will be created in industrials during this era of epochal change.

The first group of beliefs—growth, where you play, execution, and noncore exposure—comes directly from our analysis of top-performing companies. These are the levers leaders consistently used to defy sector stagnation. The next set—tariffs, AI, and talent—reflects the structural shifts transforming cost structures, productivity pathways, and competitive advantage. The final belief—investor quality—builds on themes we have highlighted in prior research: firms that communicate clearly, show up consistently, and shape their narrative earn meaningfully higher valuations.



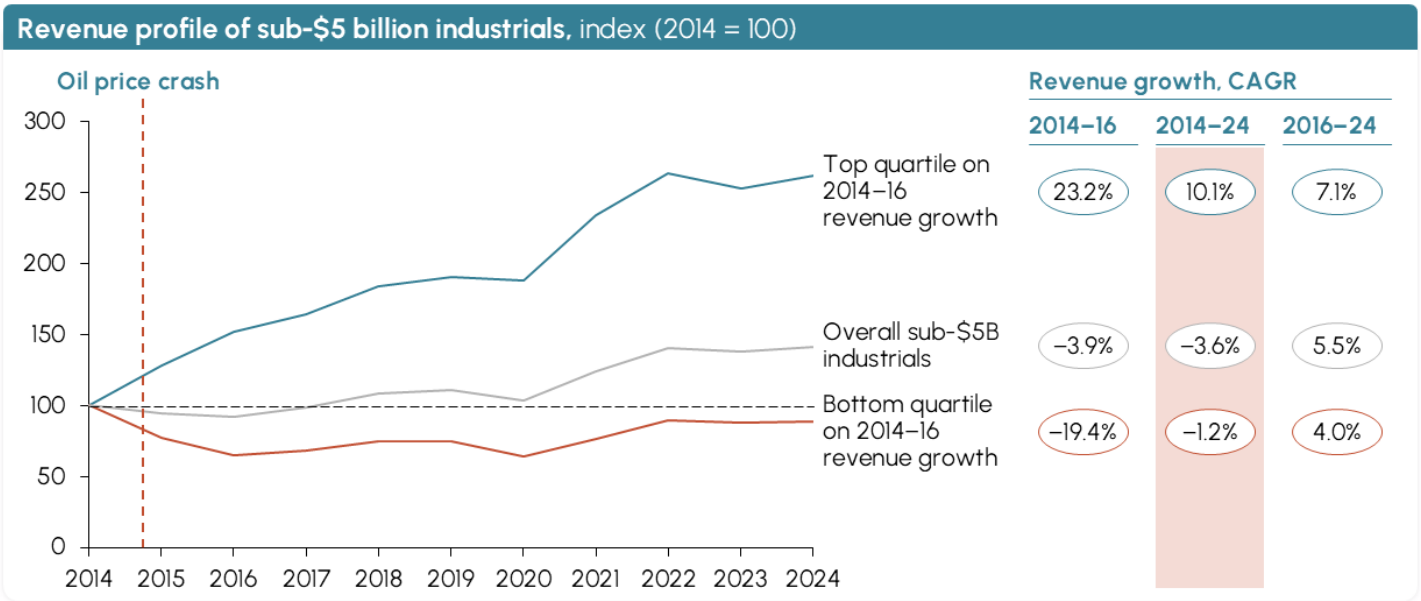
Together, these eight beliefs offer an evidence-based roadmap for how industrials can build resilience, capture growth, and create long-term value in a turbulent decade.

Growth Is Not Optional

Companies that pursue growth even during headwinds do better over the longer term than companies that cut back. During the 2014–16 oil crash, for example, revenue growth leaders among the sub–$5 billion industrial companies powered through, compounding revenue growth around 10% over the next decade (Exhibit 11). Laggards stumbled and never caught up, shrinking –1.2% over the same period.

Exhibit 11

Following the 2015 oil price crash, companies that were in the top quartile for revenue growth compounded 10% growth while laggards slid –1.2%



Source: FactSet; Ayna team analysis.

As this example illustrates, growth is the foundation of resilience. The companies that consistently outperform—through COVID, tariff shocks, and oil cycles—are those that stay positioned for growth regardless of the macro environment. Cost-cutting and efficiency have limits; they're constrained by scale and the economics of the business. Growth, on the other hand, is repeatable and far more within a company's control when it invests early, stays close to demand signals, and plays in the right micro-verticals.

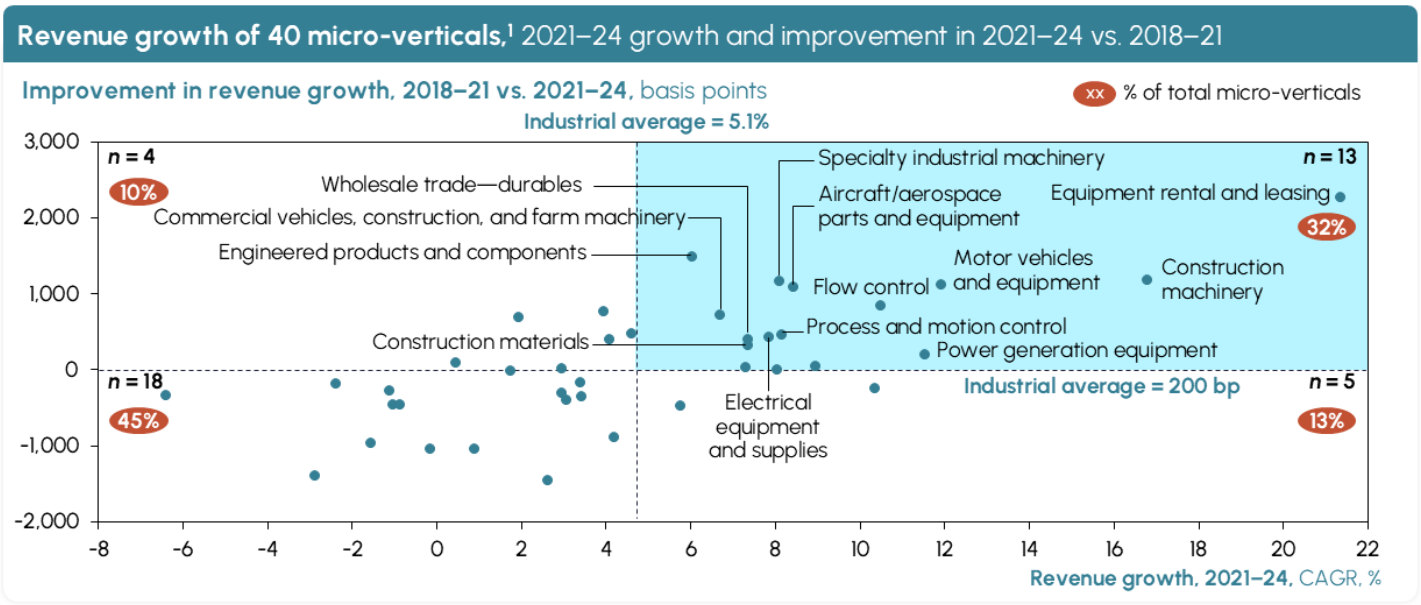
The takeaway: crises will keep coming, but companies with a growth posture—not a defensive one—recover faster, compound faster, and build resilience to withstand the next downturn.

Where You Play Outweighs How You Play

The strongest opportunities come from companies that enter the strongest micro-verticals. Secular tailwinds lifted one-third of micro-verticals to outperform industrials overall on growth during the last three years (Exhibit 12). These winners also pulled ahead on shareholder returns and valuations, and the gap between these micro-verticals and the others widened in the last two years. These fast-growing micro-verticals had average TSR growth of 7.8% in 2021–24 versus 2.7% for the other micro-verticals. And looking at just 2022–24, the top performers had TSR growth of 34.9% versus 12.6% for the others. In the market, they also commanded higher multiples with 2024 enterprise value to sales of 3.2 times versus 2.3 times for the others.

Exhibit 12

One-third of industrial micro-verticals broke out of the pack, delivering above-sector growth on the back of secular tailwinds



[1] Includes industrial micro-verticals with at least 3 companies, each with revenue >$100 million and complete financial information for 2018–24.

Source: FactSet; Ayna team analysis.

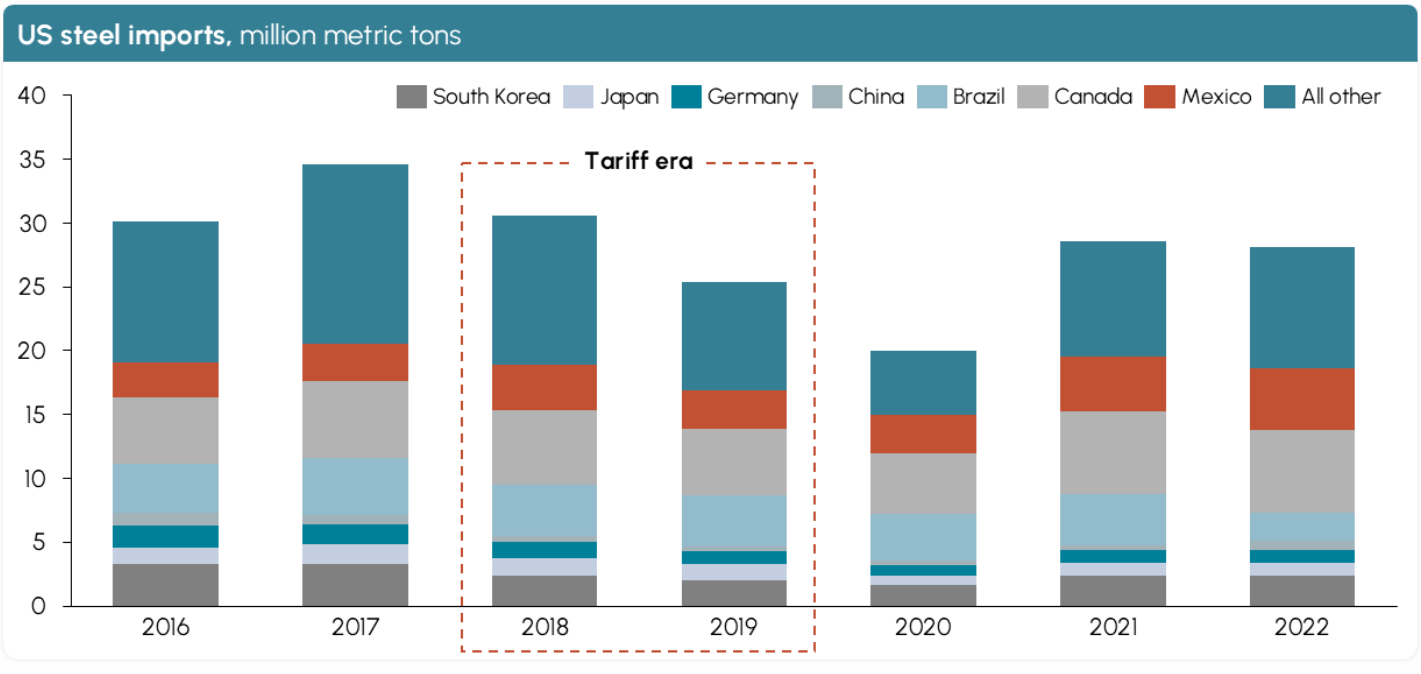
Observing these patterns, we conclude that companies can seize an advantage by identifying high-potential micro-verticals and directing investments toward them.

Tariffs Are Here to Stay

Tariffs are here to stay, so price hikes alone won't save you. Tariff regimes in the United States from 2002 to 2025 lasted four to 10 years. For example, when 2018 steel tariffs hit, steel imports declined through 2020, and as of 2022, the import level had not fully recovered (Exhibit 13).

Exhibit 13

After steel tariffs hit in 2018, imports declined and didn't fully recover



Source: US Census Bureau.

For a company to thrive under these conditions, it needs to make structural moves. Following the 2018 steel tariffs, for example, companies with local sourcing strategies reaped long-term gains.[6]

Whirlpool doubled down on domestic sourcing: starting in 2018, it sourced about **96%** of steel locally with a payoff of about **250** additional basis points from incremental tariff changes.

Ford sources 90% of its steel domestically, which enabled it to avoid a Net Operating Income headwind of $1Bn during the 2018 steel tariffs. At Simpson Manufacturing, 100% of the steel it uses to manufacture connectors is US steel; the company maintained a gross margin of 46.7% in the second quarter of 2025. And Stanley Black & Decker implemented a local-for-local footprint strategy, yielding net materials cost benefits; its cost exposure to China has dropped by roughly 20%, supporting a gross margin improvement of 140 basis points in the fourth quarter of 2024. Similarly, the relentless tariff pressure on solar panels since 2010 has pushed solar firms to expand US manufacturing.

As in these examples, industrials need long-term strategic moves, not quick fixes. Pricing plays a role, but margin gains come from pricing discipline and strategic moves, not just hikes. Among top-performing small industrial companies based on gross margins, 80% enforced contracts, leveraged segmented pricing, and curbed discounts to add about 320 basis points to their gross margin in two years.

[6] Megan Cerullo, "Whirlpool Hopes Trump's Tariffs Will Give the American Appliance Maker a Competitive Edge," CBS News, August 26, 2025, https://www.cbsnews.com/news/whirlpool-backs-trump-tariffs-to-compete-with-lg-samsung/#:~:text=Whirlpool%2C%20by%20contrast%2C%20sources%2096, higher%20prices%20for%20American%20consumers; Larry Avila, "Tariffs on Steel, Aluminum Likely Mean Higher Costs for Auto Industry," Ward's Auto, February 12, 2025, https://www.automotivedive.com/news/tariffs-trump-steel-aluminum-automotive/739872/#:~:text=But%20the%20impacts%20of%20tariffs,%E2%80%9D.

Execution Is King

Successful companies excel at widening margins and managing cash conversion cycles. Margins and cash both define strength. Sub–$5 billion industrial companies that cut their cash conversion cycle by at least 10 days unlocked 260 basis points more revenue in cash and 150 basis points more in EBITDA margins compared with their peers. Normalizing inventory by 10 days alone lifted operating cash flow conversion by 100 basis points relative to peers.

Noncore Dead Weight Is Heavier Now

Our analysis shows that growth laggards are penalized even more harshly when they are diversified. Among companies in the bottom quartile of revenue growth, diversified industrials delivered just 4.2% TSR CAGR, compared with 10.2% for pure-plays over the past two years. The same pattern appears in valuations: diversified laggards traded at only 1.6× EV/Sales versus 2.0× for pure-play laggards in 2024.

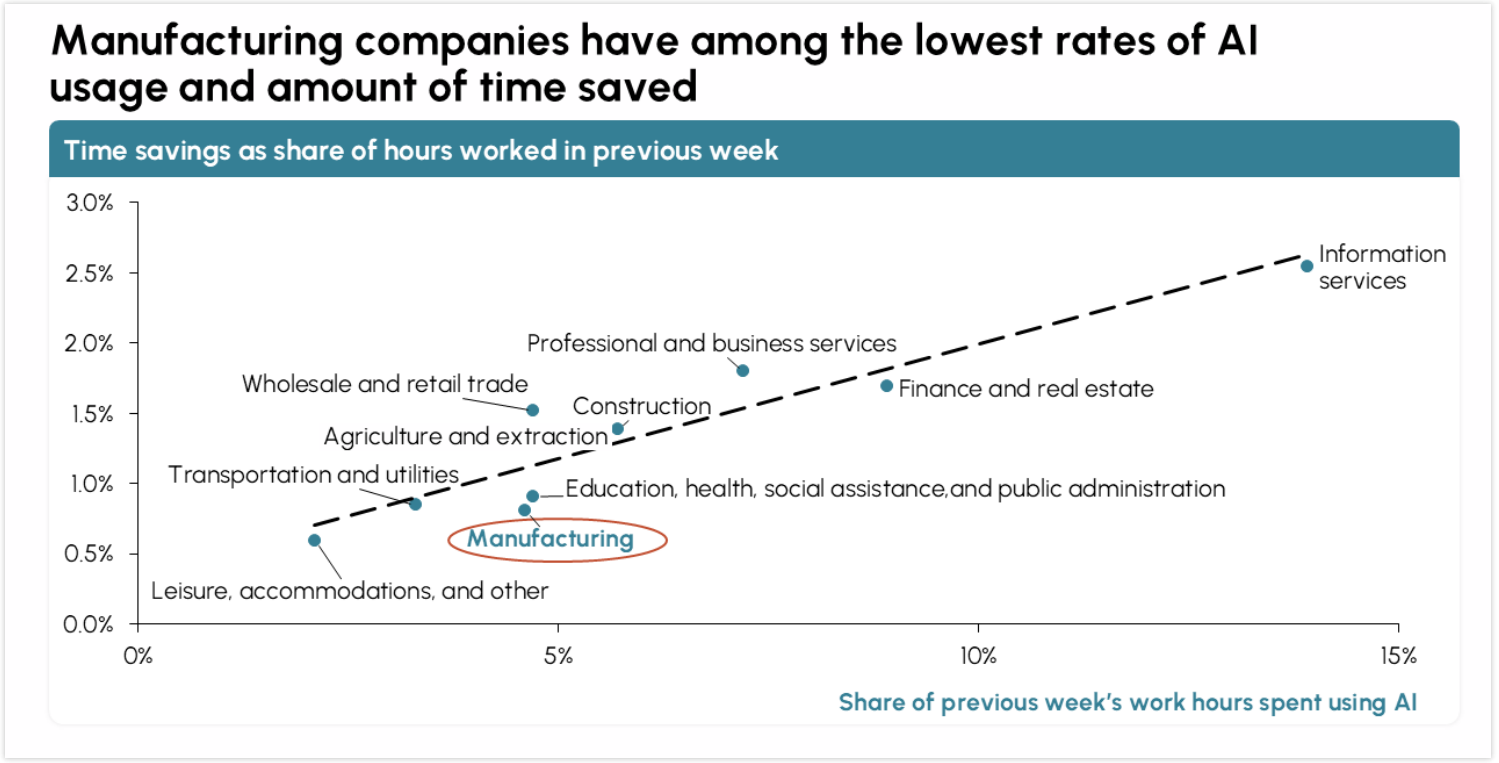
This gap reflects a broader structural reality. Diversified portfolios—classic "industrial conglomerates"—tend to carry disjointed business units, complex operating models, and slower strategic focus, making it harder for leadership teams to drive growth or communicate a clear story to the market. In contrast, pure-play companies operate with sharper strategic clarity, more coherent portfolios, and tighter resource allocation, which helps them defend valuations even when growth slows.

In other words, for companies already under pressure on revenue, being leaner and more focused acts as a buffer, while being bloated or overly diversified amplifies the downside. Slower-growing companies were consistently better off when they operated as disciplined pure-plays rather than sprawling diversified groups.

AI Is a Productivity Enabler, Not a Silver Bullet

AI may not be the silver bullet for industrials that it is for other sectors. As shown in Exhibit 14, manufacturing is expected to see minimal AI impact on industrials versus other sectors: among the lowest sectors for usage (4.6% of a week's work hours spent using AI) and time savings (0.8% of the hours worked in a week).[7]

Exhibit 14

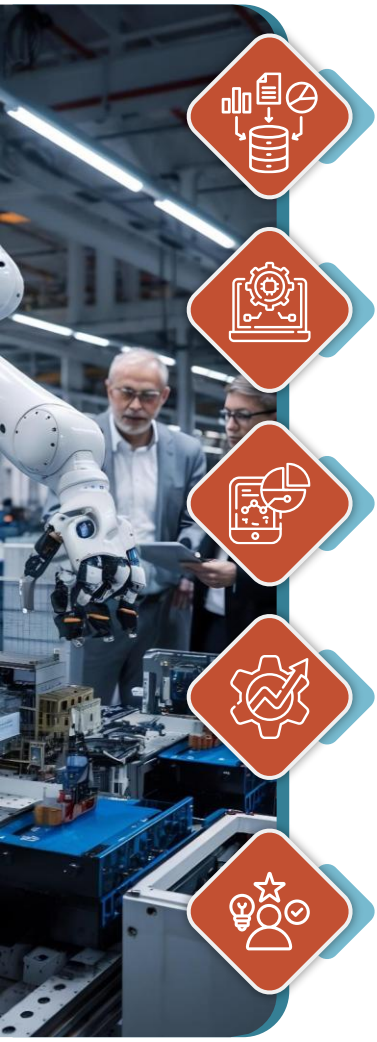


Note: Dashed line is a regression line; the correlation coefficient is 0.94.

Source: Alexander Bick, Adam Blandin and David Deming, "The Impact of Generative AI on Work Productivity," Federal Reserve Bank of St. Louis, February 27, 2025, https://www.stlouisfed.org/on-the-economy/2025/feb/impact-generative-ai-work-productivity.

[7] Alexander Bick, Adam Blandin and David Deming, "The Impact of Generative AI on Work Productivity," Federal Reserve Bank of St. Louis, February 27, 2025, https://www.stlouisfed.org/on-the-economy/2025/feb/impact-generative-ai-work-productivity.

Multiple reasons suggest why AI may not yield the same productivity improvements for Industrials:



Fragmented data, fragmented value

Data sits in silos across plants, enterprise resource planning (ERP) systems, and suppliers making it hard to feed AI models at scale.

Legacy systems drag

Outdated IT and operational technology infrastructure slows down integration limiting AI's real-time impact.

Complex, multi-site operations

Unlike digital-first sectors, industrials juggle dozens of facilities with varying maturity so uniform AI adoption is difficult.

Physical constraints

Productivity gains in industrials depend on equipment, supply chains, and labor. AI can optimize, but it can't bend the laws of physics.

Talent and adoption gap

Limited availability of talent with the skills to implement AI and translate investments into measurable ROI; lean, non-digitized teams struggle to embrace AI-driven workflows.

The bottom line: productivity leaders aren't winning because of AI—they're winning because they've mastered traditional levers: lean operations, disciplined pricing, mix improvements, supply-chain efficiency, and rigorous cost realization. These fundamentals have driven EBITDA margins 860+ bps higher than bottom-quartile peers over the last two years.

AI can accelerate these gains, but it does not replace them. In Industrials, AI is an amplifier, not the engine—true productivity comes from a strong operational foundation that AI can enhance, not substitute.

Talent Gaps Will Be Value Gaps

Investing in talent pays off in terms of efficiency, gross margins, and return on invested capital (ROIC). In a survey of 1,000 manufacturers, companies that offer more than 20 hours of leadership training per manager delivered higher sales per employee than companies providing less training ($181,000 versus about $150,000). They also had higher gross margins (about 50% versus about 30%) and ROIC (about 18% versus about 13%).[8]

Investor Quality Defines Your Multiple

As per our analysis, top-valued sub–$5 billion industrial companies, compared with their low-valued peers, have twice the share of blue-chip ownership: 28.8% versus 17.6% for the bottom quartile.[9] This ownership level exceeds the level for overall industrials (23.2%) and even the tech sector (24.7%).

Analyst coverage matters. Institutional investors typically lean in once a company is covered by five or more analysts, because deeper coverage signals credibility, transparency, and momentum. But coverage doesn't happen in isolation—it's the result of companies actively marketing their story, showing up at conferences, publishing high-quality materials, and communicating a coherent narrative about their market leadership and strategy.

Top-valued S5Cs excel at this. They invest time in educating the market, clearly articulating how they win in their micro-verticals, and consistently engaging with analysts and investors.

This creates a flywheel: stronger documentation and clearer messaging lead to more analyst attention, which brings more institutional eyes, which ultimately drives more blue-chip ownership and higher returns.

In other words, the highest-valued S5Cs aren't just operationally strong—they're also exceptional at telling their story, shaping investor perception, and making it easy for institutions to understand and believe in their long-term value creation.

[8] "Leadership Development ROI—Key Data from 1000 Manufacturers," Business Training Experts, https://businesstrainingexperts.com/knowledge-center/training-roi/leadership-development-roi-key-data-from-1000-manufacturers/?utm_source=chatgpt.com

[9] Blue-chip ownership is defined as the global top 20 institutions: Allianz, Bank of America, BlackRock, BNY, Capital Group, Crédit Agricole, Deutsch Bank, Fidelity, Franklin Templeton Investments, Goldman Sachs, Invesco, J.P. Morgan, Legal & General, Morgan Stanley, Northern Trust, Prudential, State Street, T. Rowe Price, UBS, and Vanguard.

Five Lessons from MSA Safety on Industrial Resilience

In a recent conversation with Ayna, Steve Blanco, CEO of MSA Safety, shared how a 110-year-old safety leader is navigating technological disruption, global volatility, and rising expectations for mission-critical performance. His reflections highlight how MSA sustains innovation discipline, operational resilience, and customer trust in a fast-changing industrial landscape.

1. Customer Proximity Drives Better Innovation

Blanco emphasized that MSA wins by staying deeply embedded in customer environments. “When the customer has a challenge… we’re there face-to-face to understand their needs.” This direct engagement shapes product roadmaps and ensures solutions are grounded in real operating conditions.

2. Build for the Next Wave of Safety Technology

MSA continues to invest ahead of the curve—next-generation sensors, connected safety platforms, and predictive capabilities. Blanco’s focus is on designing what workers will need years from now, not just enhancing legacy products.

3. Localized Manufacturing Creates Agility

MSA’s region-for-region production strategy helps it manage tariffs, logistics disruption, and geopolitical risk. This structure enables faster response times, improved service reliability, and more resilient supply chains.

4. AI Must Deliver Clear Operational Outcomes

MSA is applying AI across product intelligence, service models, and internal operations—but with tight governance. Blanco stressed avoiding experimentation that doesn’t scale and ensuring AI is tied to measurable improvements in safety, uptime, and customer experience.

5. Mission and Talent Are Core Strategic Strengths

MSA’s purpose-driven culture continues to attract world-class engineering and technical talent. Blanco highlighted that people join—and stay—because they see the direct human impact of their work on worker safety.

Lessons from AeroVironment on Micro-vertical (Defense Technology) Leadership

In a conversation with Ayna, Wahid Nawabi, Chairman, President, and CEO of AeroVironment, reflected on how the company has spent decades preparing for shifts in modern warfare—long before those shifts became visible to the broader market. His perspective underscores how resilience in defense technology is built through foresight, disciplined execution, and a culture that treats reliability as a strategic imperative.

1. Innovation Starts with the Mission, Not the Specification

Nawabi described how AeroVironment focuses on understanding the underlying mission customers are trying to achieve, rather than reacting narrowly to stated requirements. This mindset has shaped the company's long-term investment in unmanned systems, autonomy, and AI—ensuring solutions are designed around real operational needs, not short-term demand signals.

2. Speed Matters Only If It Reaches the Field

AeroVironment's advantage lies in its ability to compress development cycles while still delivering systems at scale. Nawabi emphasized that moving quickly from concept to production—often in one to two years—only creates value when paired with the discipline required to manufacture, deploy, and support systems reliably in large volumes.

3. Execution Defines Competitive Advantage

In mission-critical environments, execution cannot be an afterthought. Nawabi highlighted the depth of testing, verification, and lifecycle management required to ensure systems perform in extreme conditions. Trust is earned not through demonstrations or prototypes, but by delivering products that work consistently, across environments, and over time.

4. Culture and Talent Enable Endurance

Sustaining this model depends on people, attracting engineers and operators who think differently, giving them room to experiment, and preserving a culture rooted in pride, accountability, and mission impact as the company scales.

A Playbook for Industrials

Our eight beliefs shape our ideas for a playbook that industrials can apply to achieve escape velocity—that is, pull ahead of the cautious moves and stalled growth that characterize the average industrial company. Our recommended plays including aligning with growth vectors; tariff-proofing the business; executing relentlessly, augmented by AI; sharpening the portfolio; and investing in stakeholder capital (leadership and investors).

Align with Growth Vectors

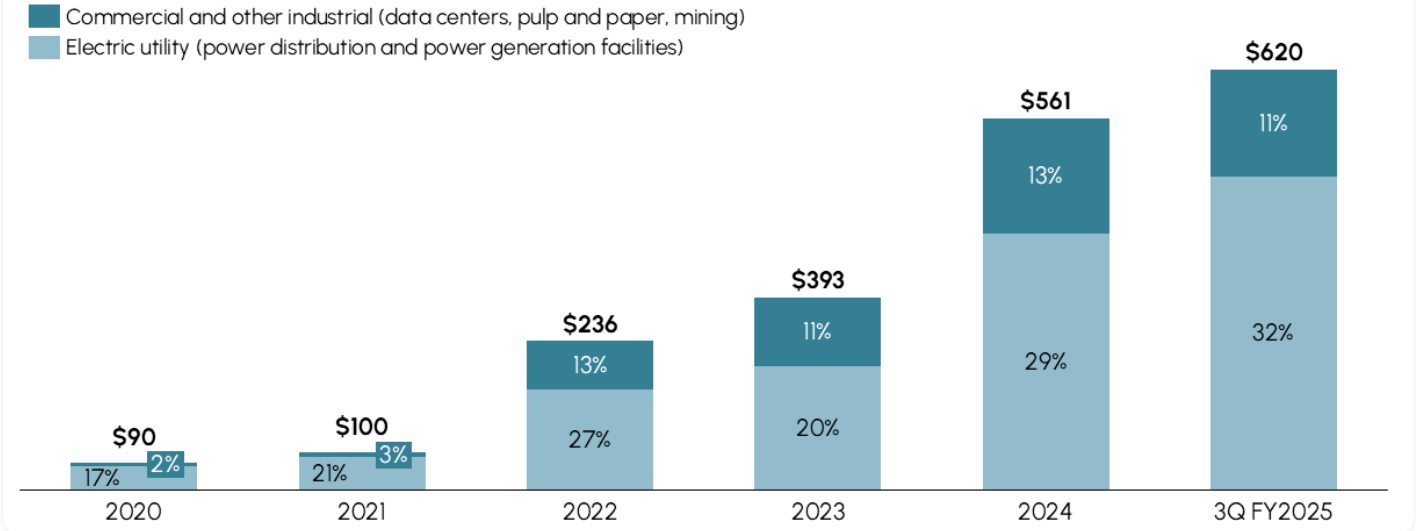
The first play is to bet big on micro-verticals that are riding secular megatrends, such as data centers, electric vehicles, and infrastructure. Companies can channel capital and talent to these and other future growth engines. For example, Powell Industries, a US-based manufacturer of custom solutions for the distribution, control, and automation of electrical energy and critical processes, has ridden the tailwinds of data center growth. The product mix shifted as data centers scaled from about 6% of the company's revenue to levels in the mid-teens. The company has expanded its footprint and is evaluating new facility investments to support data center growth; the demand is evident from Powell's growing backlog of projects (Exhibit 15).

Exhibit 15

Example: Powell Industries has ridden data center tailwinds to fuel growth

POWELL

Backlog from electric utility and commercial and other industrial sectors, $ million and % of total



Source: Powell Industries investor presentation, Aug. 2025, https://powellindustriesinc.gcs-web.com/static-files/0ba7eee5-d20f-4090-9c40-3a7eb3860854.

The move to high-growth micro-verticals often entails a move away from less attractive micro-verticals. Aligning with growth vectors includes an assessment of whether some legacy segments are receiving disproportionate resources that should be redirected.

Tariff-Proof the Business

Next in the playbook is to strengthen the company's resilience to tariffs. In terms of pricing, the company can build an adaptive pricing engine that flexes with tariffs and inflation. Other important moves are to enforce contracts, use segment pricing, tighten discount discipline, and localize supply chains and production to derisk tariff exposure.

Stanley Black & Decker neutralized tariff impact through pricing actions, cost improvements, and supplier shifts, which restored margins in six to nine months. The company implemented selective price hikes in tools and storage products, driving +2% increases in average net selling price in the second quarter of 2019. Tiered pricing protected market share while offsetting a $70 million tariff hit. The company rolled out a $250 million cost-out program across procurement, lean ops, and SG&A expenses), which delivered annual savings between $200 million and $250 million. In the tools and storage business, margins widened to about 17% versus about 16.2% in 2018, cushioning the impact of tariff, foreign-exchange, and commodity shocks. The company also rebalanced its supply chain, shifting dual-sourced SKUs to North America most notably leveraging Mexico, as well as building momentum toward cutting US tool cost of goods sold from China to nearly 5%.[10]

Execute Relentlessly, Augmented by AI

Execution is king, so companies should pursue it relentlessly, focusing on the real EBITDA levers: yield, uptime, footprint, and mix. Key initiatives would normalize inventory, optimize accounts receivable and payable, and enforce milestone billing. Industrial companies should apply AI to amplify operations, not replace execution.

[10] Powell Industries investor presentation, August 2025, https://powellindustriesinc.gcs-web.com/static-files/0ba7eee5-d20f-4090-9c40-3a7eb3860854.

A good example is Enerpac, a global leader in hydraulic tools and industrial solutions. Its end-to-end transformation has increased EBITDA by two times and delivered margin expansion of 1,090 basis points, proving execution pays in disruption. The company's transition included four transformation focus areas:

Improve operational excellence (production efficiency)

Enerpac simplified business operations, accelerated global strategic sourcing, and cut indirect spending.

Rationalize SKUs using an 80/20 approach

By focusing on the 20% of SKUs that drive 80% of value, the company streamlined the portfolio and optimized its manufacturing footprint around the highest margin, highest velocity products.

Strengthen cash generation (working capital)

The company normalized inventory levels to free up cash; optimized accounts receivable and accounts payable discipline and improved its cash conversion cycle through tighter working capital control.

Drive the efficiency and productivity of selling, general, and administrative expenses (SG&A)

The company optimized SG&A via consolidation and shared services, boosted sales force efficiency to increase customer-facing time, and rationalized legal entities to cut complexity and costs. This approach widened EBITDA margins from 14.5% in 2022 to 25.0% in 2024 and increased free cash flow margins from 7.7% to 11.9% over the same period.

Sharpen the Portfolio

Another play to consider is to carve out or divest noncore businesses to simplify and lift performance and multiples. This effort should focus on being a clear micro-vertical leader, not a diluted generalist.

AZZ's strategic carve-out of its infrastructure solutions business unlocked value for all stakeholders. In the early 2020s, AZZ was a long, steady player with reliable free cash flow from its core business, a galvanizing segment that followed a tolling model. The company had a multi-decade record of profitability: more than 35 years of near-double-digit EBITDA margins.

However, its multiples suffered from a conglomerate discount: Multiples lagged peers, with AZZ underperforming the broader market from 2010 to 2020. In 2020, AZZ's leadership conducted a strategic review and decided to accelerate its strategy to become a focused metal coatings company. Its core metal coatings business had high margins; its noncore businesses were a diverse mix of electrical equipment and industrial services, which grew through acquisitions. A carve-out of noncore businesses in June 2022 brought a cash infusion of $230 million, allowing AZZ to acquire Precoat to sharpen the company's focus on metal coatings. Following these moves, the company's share price increased two times from 2022 to 2023 and rose another 40% in 2024.

Invest in Stakeholder Capital

Stakeholder capital can deliver leadership depth, a talent advantage, and investor confidence. To get there, companies can build AI-ready leadership and reskill talent to handle automation, tariffs, and supply shocks.

To improve investor quality, companies can seek better analyst coverage, boost transparency, craft a compelling narrative, strengthen its presence at conferences, and engage key analysts. To enhance transparency and reporting, companies can improve financial reporting quality, provide regular guidance, and make detailed disclosures. To craft a compelling investor story, leaders should clarify the company's unique value proposition and growth narrative—highlighting leadership, margins, and innovation—to win trust and premium multiples.

Proactive investor outreach includes investor relations resources, road shows, and conferences. Axon, for example, provides an online shareholder letter and videos that bring product advancements to life.

To target key analysts and brokerages, engage in relationship building with sector analysts and focus on small-cap firms. Zebra stands out for its collaboration with junior analysts at conferences, and it fields detailed questions on core-versus-adjacency growth and performance targets.

Industrial companies are struggling to cope with an uncertain macroeconomy, volatile tariffs, and the fast-evolving potential of artificial intelligence. How can industrials thrive during epochal change?

Taking lessons from the companies and micro-verticals that are prospering despite the challenges, we have developed eight core beliefs that can inform a playbook for success in this time of epochal change:

- **Growth is not optional.**
- **Noncore deadweight is heavier now.**
- **Where you play matters more than how you play.**
- **AI is a productivity enabler, not the silver bullet.**
- **Price hikes alone will not protect a company from tariff impact.**
- **The talent gap will be a value gap.**
- **Execution is king.**
- **Investor quality defines your multiple.**

Applying these principles, we recommend a playbook that channels capital to micro-verticals aligned with growth vectors, gets strategic about managing tariffs, executes relentlessly, sharpens the business portfolio, and invests in stakeholder capital.

Insights from FormFactor on Navigating Industry Inflection Points

In a conversation with Ayna, Mike Slessor, President and CEO of FormFactor, shared how the company has positioned itself at the center of the semiconductor innovation cycle by staying tightly aligned with customers, investing early in emerging technologies, and executing with speed and precision in an industry defined by relentless pace.

1. Strategy Is Built Side by Side with Customers

FormFactor's strategic direction is shaped through deep, ongoing collaboration with a concentrated group of leading customers. R&D priorities are closely aligned with customer road maps and future technology transitions. This proximity helps the company focus investment on problems that will define the next generation of semiconductor testing.

2. Early Bets Create Enduring Growth Platforms

Through its "lab to fab" approach, FormFactor works with customers early in R&D, well before technologies reach scale. This allows proven lab innovations to transition smoothly into production as industry inflection points arrive.

3. Rising Complexity Raises the Bar on Execution

Advanced packaging, chiplets, and higher frequencies have increased the cost of failure. As systems become more complex, test accuracy and reliability have become critical to protecting customer economics.

4. Speed Demands First-Time-Right Performance

The semiconductor cycle now moves at a relentless pace, leaving little room for rework. FormFactor emphasizes execution discipline—ensuring products work out of the box once they reach production.

5. Geopolitics Requires Structural, Not Tactical, Responses

Geopolitical shifts have added new constraints to a historically global industry. FormFactor has responded with selective footprint and operating changes, while continuing to compete through innovation rather than short-term fixes.

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