KPMG

How industrial manufacturing can turn tech investment into growth

The US industrial manufacturing sector is moving faster and investing aggressively into AI and advanced technologies, but those moves don't always translate into growth.

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Foreword

When it comes to tech innovation, we are seeing pockets of massive innovation already in industrial manufacturing. The real challenge is how organizations scale that innovation with the discipline and intent required to deliver an enterprise-wide impact."

— **Sachin Satija**
Principal, Technology Leader, Industrial Manufacturing
KPMG LLP

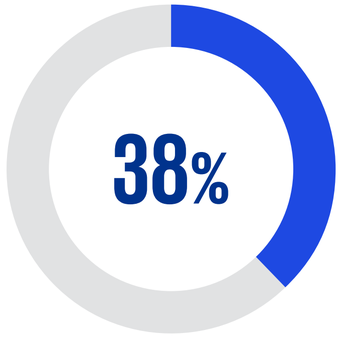
Industrial manufacturing (IM) businesses in the US understand innovation is no longer optional. New KPMG LLP research reveals that 93 percent expect investment in advanced technologies to be the top driver of competitive advantage over the next three years.

The 2026 KPMG Global Tech Report surveyed

2,500 executives from

27 countries

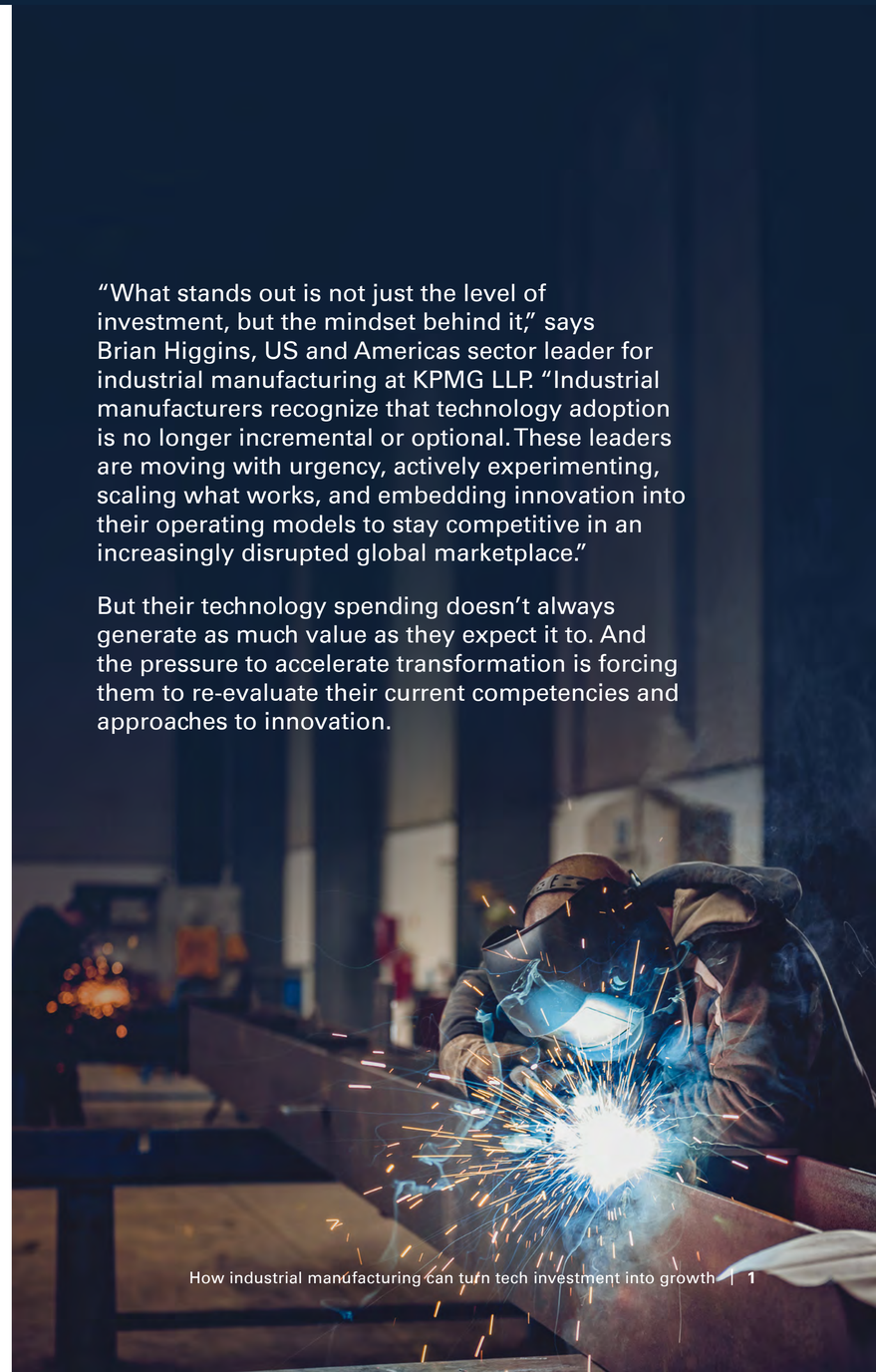
including **88** leaders from the US IM sector.



The survey found that these businesses are investing more heavily than those in many other industries, and 38 percent already see themselves as innovators or early adopters in their markets.

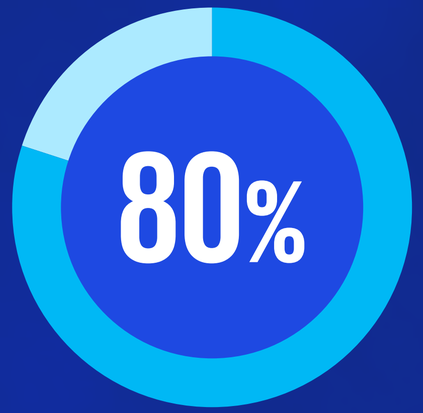
"What stands out is not just the level of investment, but the mindset behind it," says Brian Higgins, US and Americas sector leader for industrial manufacturing at KPMG LLP. "Industrial manufacturers recognize that technology adoption is no longer incremental or optional. These leaders are moving with urgency, actively experimenting, scaling what works, and embedding innovation into their operating models to stay competitive in an increasingly disrupted global marketplace."

But their technology spending doesn't always generate as much value as they expect it to. And the pressure to accelerate transformation is forcing them to re-evaluate their current competencies and approaches to innovation.



Big spenders: IM's value shortfall

IM organizations are among the biggest spenders on digital technology in the 2026 KPMG Global Tech Report: The average IM business invests almost US$233 million a year, compared with an average of US$184 million in other industries. The average IM business devotes about one-third of its investment budget to projects that are expected to bring disruptive change through radical redesigns of business processes.



Many are pleased with the results: 80 percent of IM executives say that technology frequently improves the value they generate from investment.

This is estimated at

US$336 million

in the past 12 months. But it could be better—across other industries, that figure is 89 percent.

A key reason, according to Sachin Satija, lies in how a large subset of IM organizations have evolved.

> **"Growth through merger and acquisition [M&A] activity has left many companies with fragmented technology landscapes full of redundancies."**

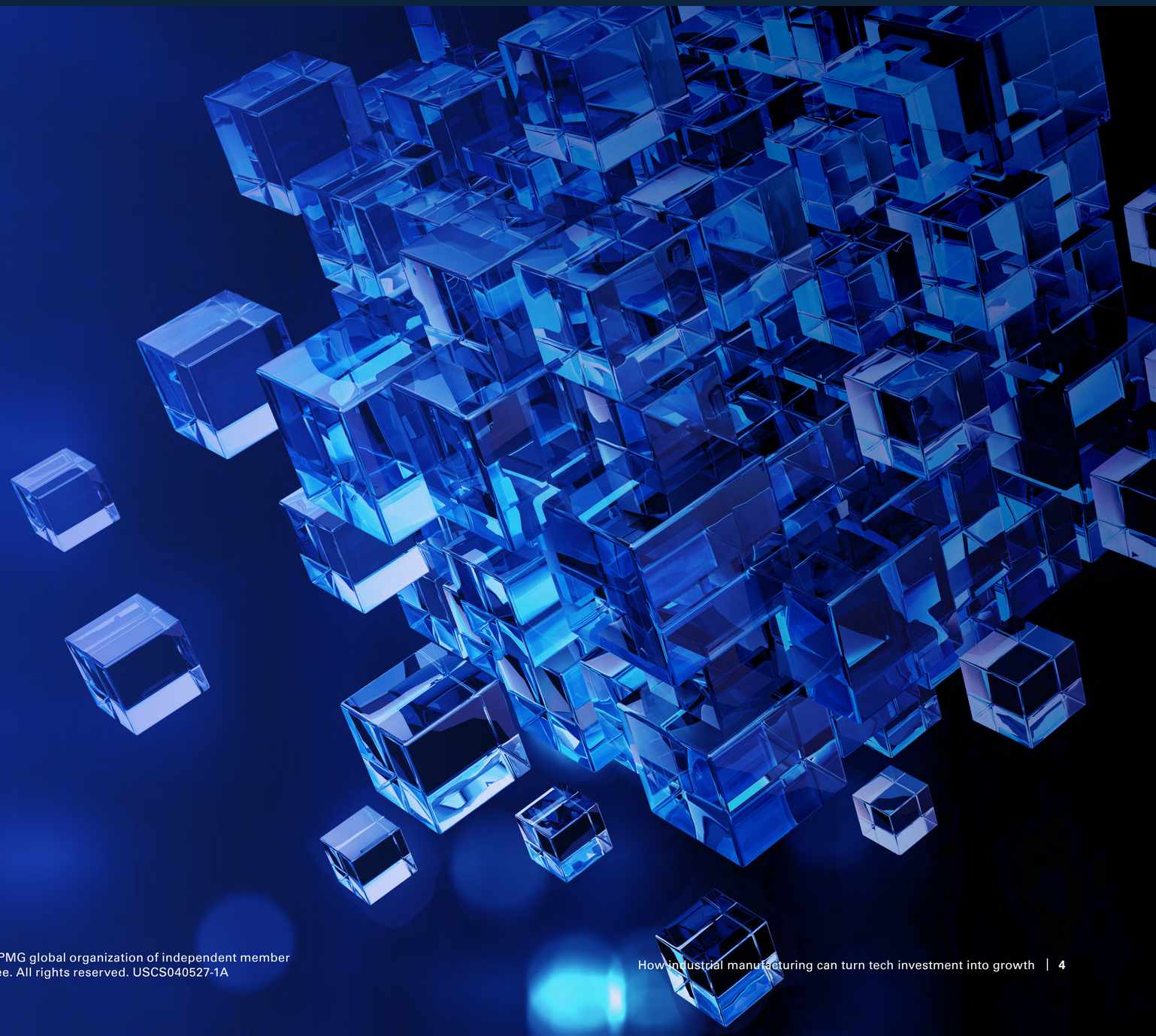
— Sachin Satija
Principal, Technology Leader, Industrial Manufacturing
KPMG LLP

He adds that their technology sprawl and complexities have also held back their transition to cloud computing. "So many of these organizations have been accumulating technology debt," says Satija. "They operate with multiple enterprise resource platforms [ERPs] with data sprinkled across them. Until those systems are rationalized and modernized with cloud, it will be difficult to realize the full value of investments in areas such as AI."

A second problem, according to Higgins, is that some IM businesses aren't building on early returns from automation and increased efficiency. "There's an ocean between the returns that organizations get from tech spending that generates individual productivity and the returns from tech spend that generates true enterprise value," says Higgins.

Resolving these two challenges should increase the value that IM businesses get from their considerable investments in technology and innovation. More of them will start to see the results they're hoping for from their ambitious and disruptive change projects.

The IM blueprint for tech



Stronger data capabilities

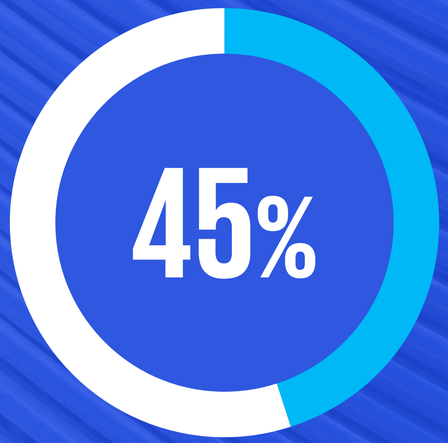
IM businesses need to approach transformations more holistically.

> **"We'd like to see more organizations running integrated transformation programs across the technology value chain, using cloud and modern data to deliver business value via AI. As they become more intentional about how their incremental technology spending aligns to business objectives, they will see exponential value realization."**

— Sachin Satija
Principal, Technology Leader, Industrial Manufacturing
KPMG LLP

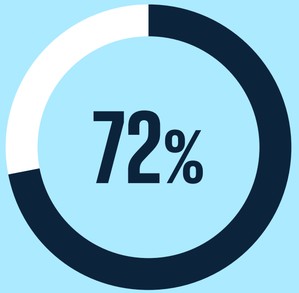
Many IM businesses are already determined to improve their data flows and analytics capabilities. Executives say that strong data foundations and access to high-quality data are going to be most critical to the success of their organization's technology strategy over the next 12 months.

When we asked how they plan to pursue their digital transformation efforts in the context of external macro environment changes, executives' top answer is that they will improve their data flows and technology infrastructure to support scenario planning and speed up decision-making. Almost half (45 percent) plan to prioritize this work over the next 12 months.



Fortune Brands Innovations is one example of an organization that has used AI in this way, reducing maintenance costs and increasing uptime through a solution that continuously monitors the performance of its industrial assets. Built on a huge library of data, including more than 500 million hours of anonymized machine data recordings, the solution saved

US$274,000 in costs and reduced downtime by 178 hours in the pilot phase alone.[1,2]



More broadly, 72 percent of US IM executives say they plan to increase their data analytics budget in the next 12 months to support their business ambitions. Their most critical areas targeted for improvement are data accessibility, data security, and data-powered forecasting.

[1] Plant Services, "AI-powered maintenance cuts downtime and costs for Fiberon's manufacturing operations," Plant Services (online), published August 1, 2025, accessed February 13, 2026.

[2] Fortune Brands Innovations (Fiberon) case study figures as reported by Plant Services (see note 1). Figures are self-reported by the company/interviewee.

Some of those improvements could come from consolidating ERPs, says Satija: "We're trying to get to complete data observability throughout the chain, but that's going to need everything to be running seamlessly on modern infrastructure."

Without this infrastructure, businesses might struggle to see where they're starting from. "You need high-quality and detailed data analytics to understand even something seemingly straightforward—such as cost to serve," says Higgins. "If you don't have the data to drill down into baseline costs, it's impossible to make a realistic plan for improvement or to judge the true impact of innovation."

That second point is important. Better data analytics capabilities could help IM businesses to resolve another issue that holds back value creation.

> **Without a robust framework and accurate data that enables you to prove your hypothesis one way or the other, you're likely to fall short."**
>
> **— Brian Higgins**
> US and Americas Sector Leader
> for Industrial Manufacturing
> KPMG LLP

Higgins' warning is supported by the data, which suggests that IM businesses are behind on tracking the performance of their technology initiatives.

Almost three-quarters

73%

say they track how these initiatives are progressing against the business's plans and projections,

but this is almost

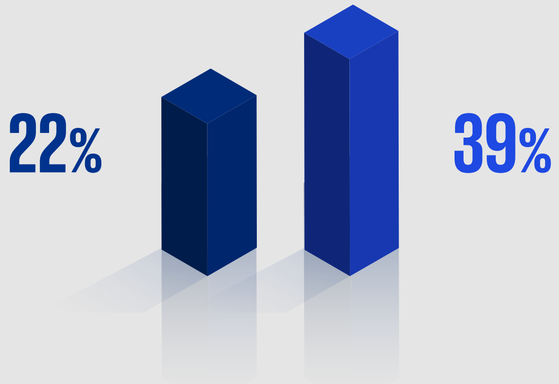
10%

10 percentage points lower than the average across other industries.

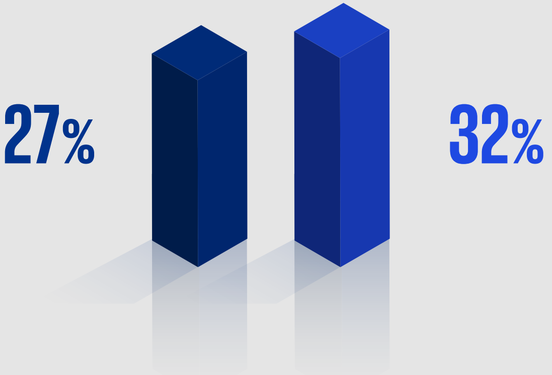
By improving performance tracking, IM businesses could start to make more targeted technology investments.

Decentralized by design

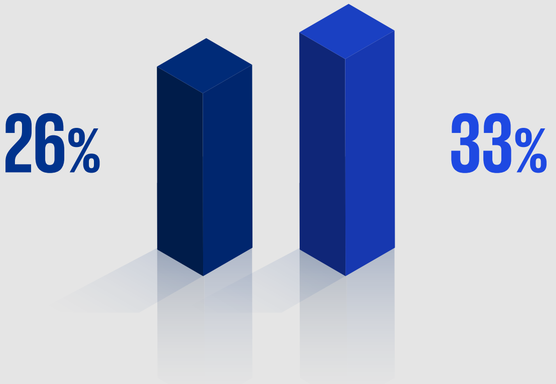
Another imperative for IM businesses is to decide whether transformation comes from the center or is diffused throughout the organization. Many have chosen decentralization:



22 percent of IM executives say that prioritizing and planning technology investments is fully centralized within the information technology (IT) function, compared with 39 percent of executives in other industries.

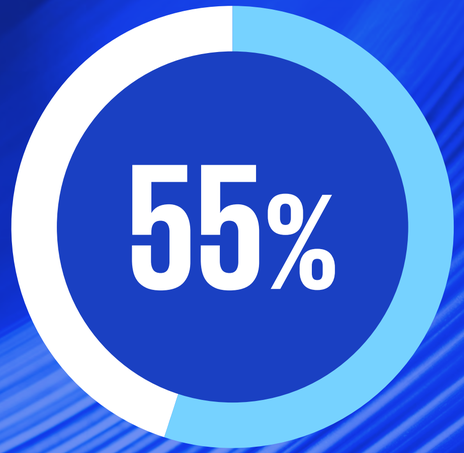


27 percent take a centralized approach to defining the vision and ambition for the whole business, compared with 32 percent across other industries.



26 percent fully centralize architectural and governance policies, compared with 33 percent in other industries.

This is not the case in every IM subsector. In automotive, for instance, businesses are far more likely to prioritize and plan technology investments from the center.



Higgins points out one drawback of decentralization.

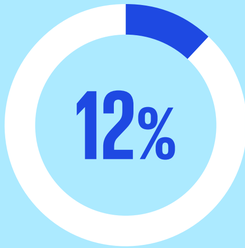
> **Democratizing innovation is great for exploration and accelerating the speed at which you can test a hypothesis, but it's really bad for scale. If you're going to operate in a decentralized environment, you need to think about how you'll drive value for the whole organization. How do you make sure winners identified in one area are scaled into initiatives with investment across the rest of the business?"**

— Brian Higgins
US and Americas Sector Leader for Industrial Manufacturing
KPMG LLP

This is a question that IM businesses will need to engage with as they explore the potential of emerging technologies. When we asked how they would deal with a hypothetical breakthrough technology that could enhance performance, but might also disrupt the business model,

of IM executives say they would empower teams with decentralized innovation.

This is 12 percentage points higher than the average across other industries.



Decentralization might be a good fit for some IM businesses—particularly the ones with more federated or siloed operating models, perhaps because of recent M&A activity. And frontline units might be in a better position to evaluate and execute the business benefits of technologies such as AI.

57%

More than half of IM businesses (57 percent) say their IT function is leading on AI implementation rather than collaborating...

69%

...but this figure rises to an average of 69 percent across other industries.

But as Higgins points out, it can be difficult for an organization to scale at speed when it operates in this way. And some IM businesses don't seem to recognize this problem.

19%

Only 19 percent of executives agree that they have too many disconnected AI projects and teams...

31%

...with limited coordination. Across other industries, that figure is 31 percent.

Ford is one example of an IM company that has successfully scaled an AI initiative that was piloted at its Kentucky Truck Plant. Its smartphone-based AI inspection tool allows plant workers to check quality at key workstations (e.g., wiring, connections, and interior trim fit) and flag issues in time for in-station fixes. Ford engineers describe the system as portable and scalable, enabling consistent checks without slowing the line. Following the pilot, it has been deployed to hundreds of stations across multiple plants.[3]

[3] Dan Carney, "Ford's Kentucky Truck Plant Embraces AI & 3D Printing for Enhanced Vehicle Production," Design News (online), June 6, 2025; accessed February 13, 2026.

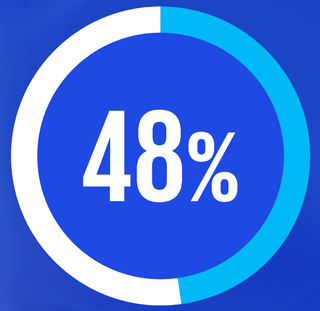
Tech with guardrails

IM businesses can borrow from their own product development disciplines to strengthen technology governance.

> **Manufacturers have long relied on rigorous, structured governance for physical products. Applying similar principles to technology investment could significantly improve outcomes."**

— Sachin Satija
Principal, Technology Leader, Industrial Manufacturing
KPMG LLP

Given how much the IM sector is investing in technology, it needs processes that dictate where money is spent, how value is assessed, and criteria for investment. These processes are also crucial because of the speed at which the industry is moving:



of IM executives say they're innovating and deploying AI use cases into production at scale, delivering returns on investment across multiple use cases,

compared with 28 percent across other industries.

They're planning multiple digital enhancements over the next two years:

43%

of IM executives expect to implement advanced data analytics to increase time to market and reduce downtime.

42%

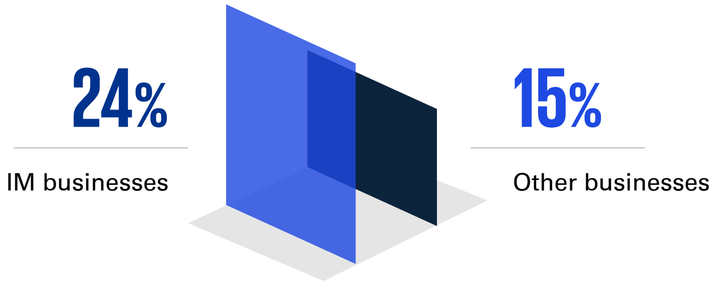
have plans to use generative AI for product design and customization.

38%

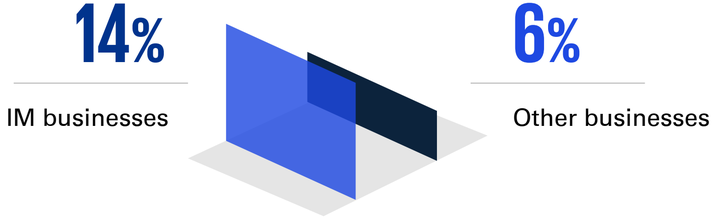
plan to use AI and machine learning for predictive quality control.

But is transformation happening too quickly?

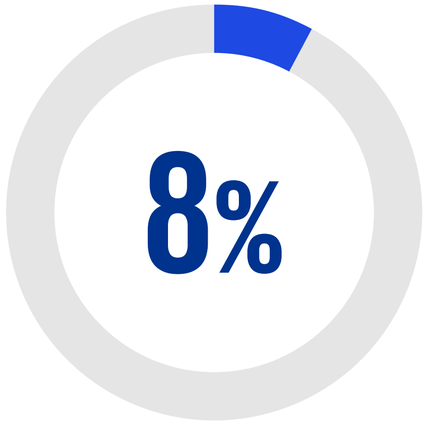
Almost a quarter of IM businesses (24 percent) worry that they're not implementing policies and guardrails at the same pace as they're investing in AI, compared with only 15 percent across other industries.



A minority of IM businesses (14 percent) say they don't have a cross-functional AI governance structure in place that includes executive sponsorship, risk, legal, and compliance, but the figure is just 6 percent across other industries.



Some parts of IM appear to be moving more cautiously: Only 8 percent of automotive businesses, for example, say that investment in guardrails and policies isn't keeping up.



For technology spend to deliver success, the governance process has to be robust and purpose-built. In automotive, planning and governance is more centralized because of stringent safety and regulatory standards. The rest of IM might need to take a similar approach."

— Sachin Satija
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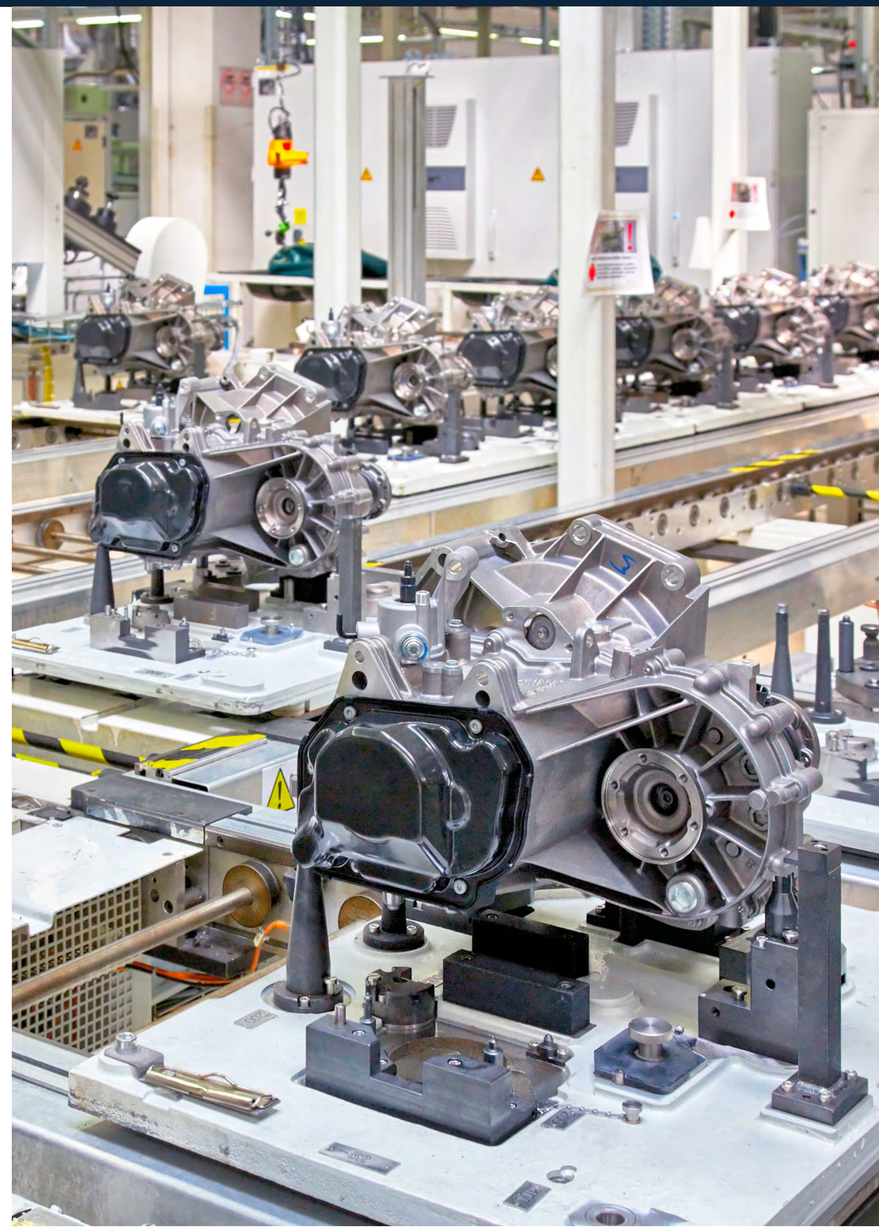
KPMG LLP



Three moves for IM leaders in the next 12 months

Three moves for IM leaders in the next 12 months

There's a lot for IM businesses to be pleased about in the latest KPMG Global Tech Report. Their bigger investments in new technology and innovation are starting to give them returns, but there's still more work to do.

To maximize the value they're getting from their outsized investments and scale the successes they've achieved in parts of their business across the whole enterprise, they need to:

Attack process and tech debt first

Growth is good, but it often brings fragmentation, duplication, and creeping complexity. IM executives need to go on the offensive, accelerating system modernization and prioritizing "legacy exit" strategies. This will enable them to unlock the full value of new technology investments—especially before the next wave, including agentic AI, raises the stakes even further.

Focus on impact, not experimentation

A scattergun approach to AI breeds fatigue and failure. Too many initiatives stall at the proof-of-concept stage, delivering little impact and increased frustration. Instead, IM businesses should focus intently on high-value production challenges and commit to targeted, established solutions that can scale.

Fix data before blaming AI

In manufacturing, AI rarely fails—but data does. Weak, inconsistent, and siloed data undermines even the best models. To see real impact, IM businesses must invest in strong data and analytics foundations first. Without them, AI becomes an expensive experiment—not a true driver of value.

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