

AI at an inflection point

From pilots to production

The Q4 2025 Think Circle brought together senior leaders across manufacturing, defense, technology, pharmaceutical, consumer, and semiconductor industries at a moment when AI ambitions are increasingly colliding with organizational reality.

The discussion reflected both progress and pragmatism. Leaders shared a growing sophistication in how they view AI's promise, paired with candid recognition of obstacles such as data governance complexity, cultural resistance, and the difficulty of demonstrating meaningful ROI.

The ambition is there. A recent IBM IBV study found that 80% of executives are increasing investments in agentic AI, with spending projected to nearly triple by 2027. But without the right technical frameworks, data strategies, and execution plans, much of that investment will remain trapped in proofs of concept, delivering pockets of value instead of enterprise-wide transformation.

"The biggest challenge isn't the technology. It's the people accepting there's a different way to do work."

Despite these challenges, leaders pointed to meaningful progress already underway. Strong proof points emerged as well, from procurement teams reducing buyer-to-spend ratios by 60% to supply chain organizations approaching lights-out planning.

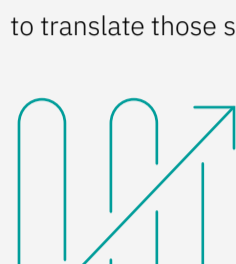
Again and again, participants returned to the leadership and workforce dimension.

Capturing contextual intelligence, redesigning workflows, and supporting teams through new modes of decision-making are increasingly becoming the differentiators between organizations unlocking real value and those still testing the waters.

Reframing ROI

Turning productivity into performance

Thinkers explored the evolving definition of ROI in AI programs. While personal productivity tools such as Copilot deliver visible efficiency gains, many organizations struggle to translate those savings into financial impact.



According to IBM IBV research, only 29% of organizations say they can reliably measure ROI from AI initiatives today.

However, 79% report measurable productivity gains.

Some Thinkers shared compelling examples, such as procurement groups cutting staffing needs from 60 to 24 buyers per billion dollars in spend. Others emphasized that time savings often function as an "off-balance-sheet-currency" that should be reinvested into more strategic work.

The gap between visible time savings and measurable enterprise impact is widening, intensifying pressure on leaders to translate productivity into financial value. Straightforward optimizations—such as automated guided vehicle routing—drive immediate and measurable returns. But more complex transformations require patience and maturity.

"It's like hiring a new colleague. They have to train up...and continually get better."

Data as dynamic intelligence

Capturing context, not constraining it



Organizations have built strong data foundations. Privacy, governance, accessibility, and integration are priorities for most.

The challenge is evolving those foundations for agentic AI to make data faster, more connected, and ready for agents that learn and adapt in real time. The IBM IBV found that while 60% of executives say their practices are future-ready, they need to turn readiness into a competitive advantage by embedding agentic-specific requirements into their data strategy now.

But readiness alone isn't enough. Leaders emphasized the need to capture the contextual judgment that supply chain professionals apply instinctively.

"I was pretty ignorant for years not to see that...there's dynamic context which people have in mind."

A major insight emerged around the evolution of data strategy. Rather than enforcing a single rigid version of the truth, leading organizations are beginning to capture the contextual knowledge people add when they manipulate or interpret data. One leader described systems where users adjust data through natural language, allowing the platform to learn and codify those contextual layers for broader organizational benefit.

"AI readiness means having metadata and context-aware data available so agents will find the information."

"We aligned data ownership to process ownership. Our chief supply chain officer owns all the data elements in that space."

"Don't try to put AI on your existing processes... really go into process re-engineering and rethink the processes."

From individual tools to enterprise transformation

Building the platform for scale



"Eliminate, simplify, automate, and now with agentic, orchestrate—in that order."

Thinkers distinguished between "everyday AI" tools that boost team-level productivity and "enterprise AI" initiatives that reshape operations more broadly.

Unlike traditional AI, which often positions the workforce as supervisors of static systems, agentic AI thrives when people and agents collaborate. People provide judgment, creativity, orchestration, and oversight, ensuring decisions align with strategy and values. Agents surface insights, execute actions at speed and scale, and adapt in real time. The partnership is adaptive, shifting gears based on conditions, priorities, and performance data.

The challenge—already visible in many organizations—is preventing tool proliferation while maintaining strong governance. As adoption accelerates, many organizations are also confronting a rapid expansion of tools that can outpace governance.

"It's very easy for our people to create AI tools. How do you ensure you don't end up with competing projects?"

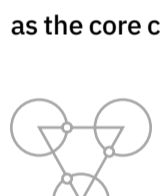
"They're not just sitting there randomly. They sit within a management function."

The lively discussion among the Thinkers pointed to a maturing platform approach:

- Catalogs of approved AI agents and tools
- Clean core architectures with adaptable intelligence layers
- Workflow ownership that cuts across organizational boundaries
- Recognition that agents require oversight just like teams

Empowering teams in the age of autonomy

Culture change as the core challenge



"We have problems of sabotaging within different organizations because people are seeing that as a threat to their job stability."

Cultural transformation surfaced as one of the most significant barriers to scale. Leaders discussed the shift from specialist-driven processes to end-to-end workflow ownership, emphasizing augmentation rather than replacement.

"If you keep the same team, you should be able to grow the business. Your cost leverage will improve."

The mindset shift from *how can AI help our existing processes?* to *how do we redesign our operations with AI at the center?* is proving essential.

Several Thinkers described this as the rise of workflow leadership—the ability to shape end-to-end outcomes unconfined by traditional functional boundaries.

"My focus is on creating an agile organizational structure. Roles are changing, not just for teams. Stakeholders and leadership also need to realize they will change. Everyone's looking to the workforce to embrace AI but, when they do, that changes the foundation of the enterprise as well."

Operating at the edge

Adopting a Formula One mindset



"If you want to win in a Formula One car, you have to accelerate faster, do weight reduction, and brake later."

This metaphor captured the next stage of AI maturity: operating closer to the limits while managing risk effectively. Organizations described their evolution from connectivity and dashboarding workflows for connected teams to manage, to pockets of autonomous experimentation, and ultimately toward fully autonomous operations.

Examples included:

- Lights-out planning** where "nobody touches it—machines do the work"
- Self-optimizing** safety stocks and lead times
- Resilience monitoring** with 80% self-healing capabilities
- Option identification** for commodity trading and value capture

Industry perspectives

Shared aspirations, different constraints



"Whenever AI applications are within a single organization, it's faster to implement. When data crosses boundaries, that's where the challenges come in."

These themes played out differently across industries, reflecting distinct levels of maturity and constraint:

Manufacturing: Focus on standardization and unified system architectures to support autonomous operations

Defense and regulated industries: Heavy internal development driven by security and compliance, with success in targeted applications like contract intelligence extraction

Pharmaceuticals: Progressive autonomy through "lights-out planning" through staged increases, such as 30% no-touch, then 35%, then 40%

Semiconductors: Strong emphasis on trust and data security with progress in internal dashboarding but challenges in broader supply chain integration

Looking ahead

Integrating AI into everyday operations

Thinkers cautioned against pursuing AI for its own sake, noting that many problems do not require Large Language Models. Cost discipline is becoming increasingly important as organizations scale LLM-based applications. Leaders emphasized the importance of real-time monitoring of agent costs and staying grounded in use cases that deliver tangible value.

The conversation surfaced several pragmatic priorities to guide execution in the coming year:

- Accelerating the sharing of practical use cases
- Focusing on growth opportunities, not just cost reduction
- Investing in change management and trust-building
- Recognizing that value realization follows a curve, not a step function
- Balancing democratization with governance

"Pretty soon, we're not even going to say the words 'AI.' AI is just going to be part of how we do things."

Closing reflections

Reimagining work for an AI-enabled future

Think Circle members find themselves at a pivotal point. The technology has matured quickly, meaningful use cases exist, and early adopters are demonstrating clear business value. Yet the leap from pilot to scaled transformation remains challenging for the many.

"We had to stop thinking of AI as a tool and start thinking of it as a teammate."

The organizations moving ahead have shifted their mindset. They are no longer asking what AI can do for them; they are asking what they can become with AI.

They think in end-to-end workflows rather than legacy functional boundaries. And they recognize that lasting change requires bringing people along, addressing concerns while building new capabilities.

Preparing the workforce to guide, refine, and learn from autonomous agents is essential. Executives understand this, with 71% saying they are constantly fine-tuning the relationship between people and agents.

The question is no longer whether AI will reshape operations, but whether organizations will evolve quickly enough to harness its full potential. The insights shared in this discussion offer a practical roadmap—grounded not in speculation, but in the real experiences of leaders navigating transformation in real time.

Turning vision into measurable progress requires deliberate action. Advancing maturity in an agentic AI operating model doesn't call for sweeping change overnight, but it does demand focused steps that strengthen architectural foundations, refine data strategy, and build deeper collaboration between the workforce and AI:

1. Build the architecture for agentic AI

Leverage existing cloud or hybrid infrastructure for agentic AI by mapping where autonomous agents will run, what data they'll need, and how they'll connect across environments. Define agent identity and authentication, role-based access to data, and automated logging for audit readiness.

2. Enable continuous data flow to and among agents

Pinpoint high-impact data sources most critical to agent decision-making in priority use cases and integrate them into a unified environment. Set up a closed-loop feedback process so the outcomes of agent actions are automatically captured and used to retrain or fine-tune models, supporting continuous learning.

3. Redefine impact of employees and agents

Advance autonomous performance monitoring using existing analytics or monitoring tools. Then redefine KPIs for one or two pilot workflows to measure both workforce and agent contributions. Include metrics for accuracy, decision speed, and adaptability.

For more data and insights, check out:

[The essential guide to agentic AI: How to compete in an autonomous future](#)

[Agentic AI's strategic ascent: Shifting operations from incremental gains to net-new impact](#)

[Quantum is coming: 5 realities shaping the race to advantage](#)

IBM Institute for Business Value

Published in partnership with IBM Think Circles

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