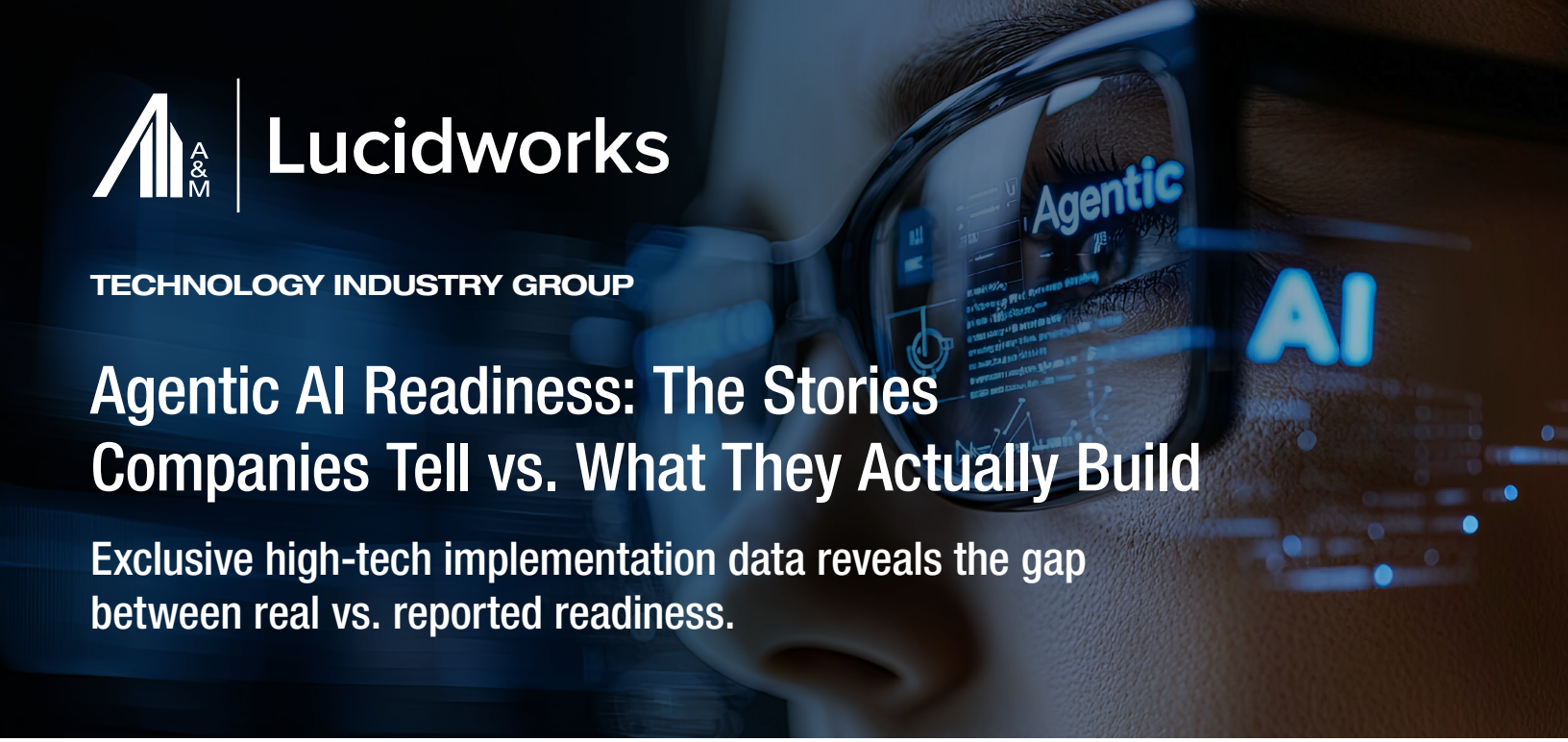


Lucidworks

TECHNOLOGY INDUSTRY GROUP

Agentic AI Readiness: The Stories Companies Tell vs. What They Actually Build

Exclusive high-tech implementation data reveals the gap between real vs. reported readiness.

The AI Market Problem

High-tech customers demand precision, speed, and trust. Companies in the software, semiconductor, and cybersecurity sectors are expected to lead the AI wave, not lag behind it. That makes agentic AI readiness mandatory, not optional. However, the AI hype cycle has left many high-tech companies asking the wrong question: "What AI features should we adopt?" instead of "What foundations do we need to prepare for agentic AI success?"

This brief outlook from Alvarez & Marsal and Lucidworks provides leaders with a clear, actionable framework to assess AI readiness—and showcases prime examples of high-tech leaders facing these questions.

95%

of generative AI projects fail to deliver ROI (MIT)

Only

35%

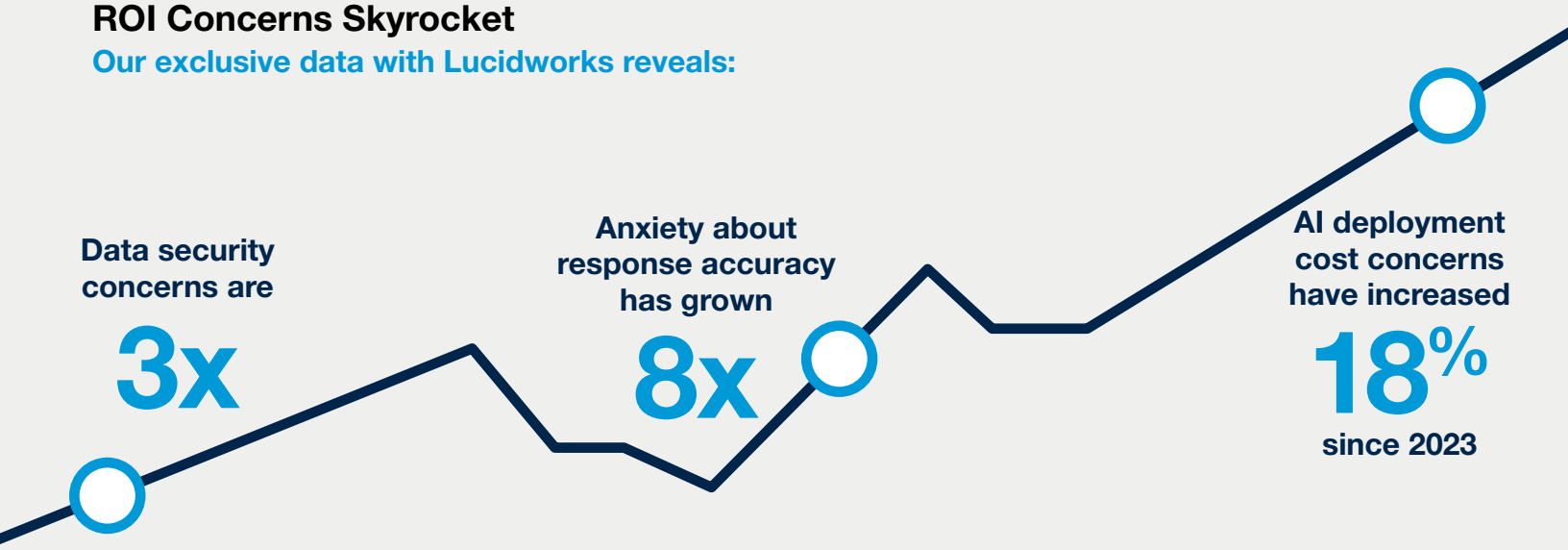
of companies meet minimum requirements for agentic AI (Lucidworks)

83%

of AI leaders report "major" or "extreme" concern about AI implementation

ROI Concerns Skyrocket

Our exclusive data with Lucidworks reveals:



Growing pains have now evolved into warning signals that companies are rushing toward AI transformation without investing in the foundational capabilities required to sustain it.

Source: 2025 Benchmark Data analyzed and reported by Lucidworks' Market Intelligence Agent

Agentic AI Readiness: State of Cybersecurity and Semiconductor AI Industry

In software and cybersecurity, customers expect precision, reliability, and exceptional experiences—especially when they're AI-powered. AI hallucinations or security mishaps don't just hurt user experience; they destroy credibility in sectors where trust is everything.

Analysis from Lucidworks reveals a troubling gap: Software companies have implemented an average of 65% of e-commerce essentials (like a 'Request to Sign Up' functionality), but have implemented only 39% of agentic AI capabilities (like 'Technical Interrogation'). They're not even mastering the basics, yet they're chasing advanced AI features.

> The rising prominence of AI has essentially converted adoption into an arms race—with many cybersecurity enterprises classifying automation as agentic AI just to avoid being considered as lagging edge; AI automation should be use-case led and contextually relevant to detect and deter the evolving threat environment."
>
> **– A&M Cyber Expert**

Agentic AI Readiness Means Being Enterprise Grade

Agentic AI presents a major leap in enterprise technology, surpassing the capabilities of traditional automation and assistive AI. In contrast to traditional automation, agentic AI provides true autonomy, fundamentally transforming how businesses address challenges and manage operations. These advanced AI agents have the ability to reason, plan, and manage actions across interconnected systems.

However, realizing the full potential of agentic AI requires more than deploying advanced models. Enterprises must establish a comprehensive ecosystem that includes data pipelines, robust governance frameworks, enhanced security, and scalable infrastructure.

Additionally, autonomy requires flexibility, meaning companies must invest in scalable infrastructures that can handle unpredictable workloads, random demands, and continuous multi-agent coordination, all while maintaining high performance and decision accuracy.

According to Gartner, 33% of enterprise software applications will incorporate agentic AI by 2028.

AI Readiness Requires:

- **Data Pipelines**
- **Robust Governance Frameworks**
- **Enhanced Security**
- **Scalable Infrastructure**
- **Continuous Multi-Agent Coordination**
- **High Performance**
- **Decision Accuracy**

Even if enterprises are not ready to fully adopt AI agents today, their technology partners must be prepared to enable rapid deployment when the time comes. This readiness includes providing scalable platforms, advanced governance tools, and deep expertise in AI integration.

Without such support, enterprises risk falling behind as the demand for agentic AI accelerates. By collaborating with forward-thinking technology providers, organizations can future-proof their AI strategies, positioning themselves to capitalize on emerging opportunities and maintain a leadership edge in an increasingly AI-driven world.

> Many tech enterprises consider AI readiness as an academic / compliance need; however, ensuring organizations are primed for the agentic AI evolution is a significant differentiation lever. The need to assess your infrastructure, minimize resistance, explore synergies, and define a tailored roadmap early can deliver long-term value at scale."
>
> **– Fortinet**

Key Building Blocks of AI Deployment/Readiness

Companies in high-tech sectors such as cybersecurity and semiconductors are rushing to integrate AI into their offerings. Often, these initiatives prioritize trend adoption over concrete customer outcomes, leading to "shiny object syndrome," where **you use feature-rich solutions or chase the latest discoveries without a clear connection to commercial outcomes.**

Companies are also increasingly portraying **simple rule-based automation as sophisticated AI technology through a practice known as "AI washing,"** which blurs the boundary between actual innovation and marketing hype. This approach dilutes resources, fragments investments, and sometimes yields no measurable return.

Evidence supports this challenge. According to a recent MIT study, 95% of organizations in the dataset are getting zero returns, despite $30–$40 billion in enterprise investment into GenAI. Similarly, an IBM study revealed that 65% of telecom executives admitted their AI investments have failed to deliver the expected value.

To achieve this, businesses require a structured approach to AI readiness, built around 10 key foundational areas that define an organization's ability to scale AI for customer value. These areas can be grouped into three strategic pillars:

Data Foundations

Includes digital experience foundations, data quality and integration, governance and security, and scalability and infrastructure.

This pillar represents the technical foundation that enables AI to deliver customer value on a scale. Companies must establish robust data pipelines and secure governance frameworks and scalable infrastructure before deploying customer-facing AI capabilities.

Capabilities

Encompasses automation vs. AI distinction, agentic capabilities for autonomous problem-solving, and customer journey mapping to identify high-value intervention points. This pillar focuses on developing real intelligence that has a measurable effect on customers, rather than merely using automation to keep up with market trends.

Execution

Includes partner ecosystem readiness, comprehensive measurement and ROI frameworks, and organizational alignment and skills development. This pillar ensures AI initiatives translate into sustainable business outcomes through proper implementation and management.

Build the Right Foundation: Precision AI Strategies That Deliver Value

In the high-tech sector, where digital experiences often define customer loyalty, precision is critical at key touchpoints, including self-service portals, intelligent search, troubleshooting, ordering, and account management.

Agentic AI Readiness within Cybersecurity

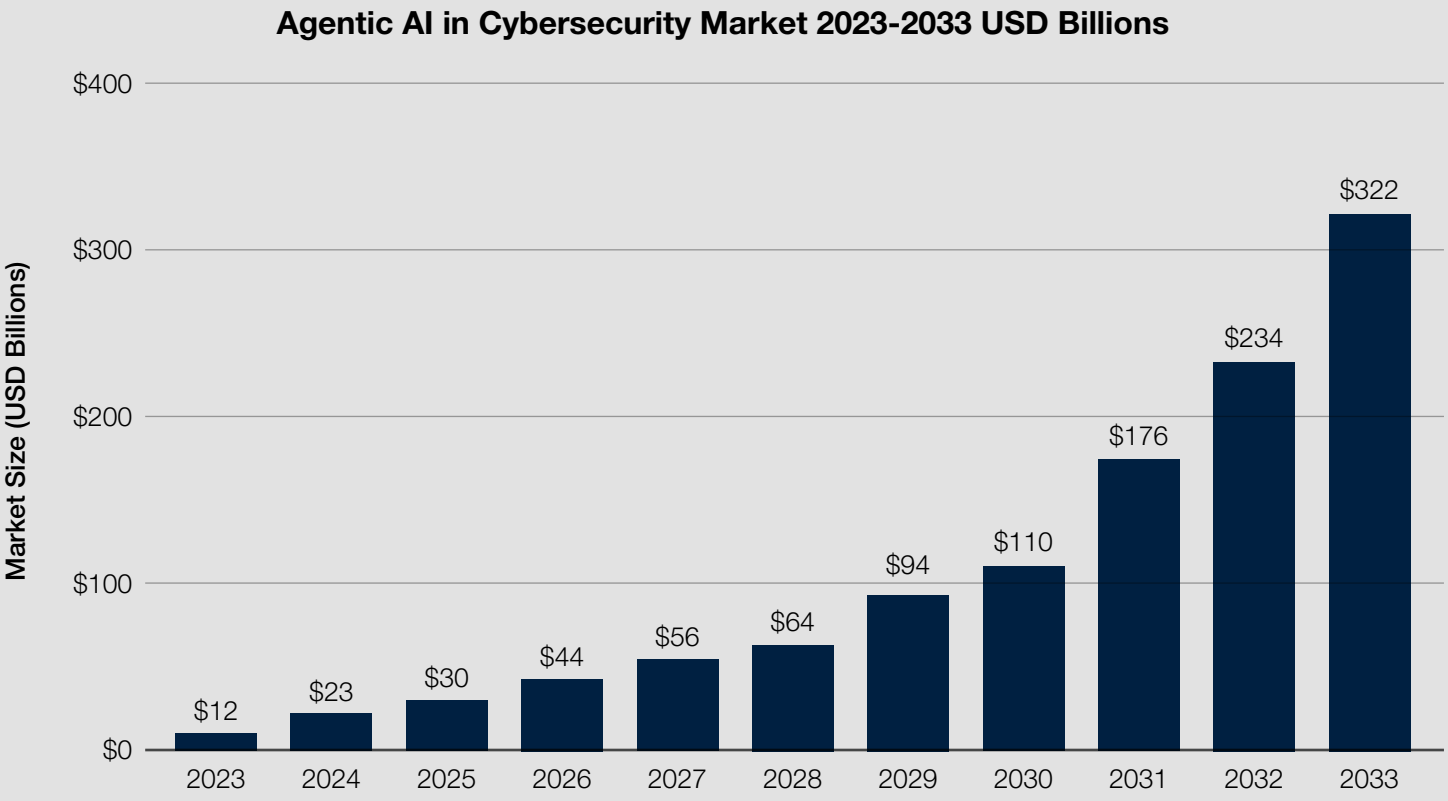
While these foundational elements are common, there are also domain-specific aspects to consider when preparing for agentic AI. In domains such as cybersecurity, where data security, identity management, and data loss prevention are most important, organizations must prioritize secure, scalable, and resilient systems that recognize sensitive information, identify attack chains, and detect unauthorized access patterns.

As digital interfaces expand, the attack surface grows, making cybersecurity a top priority for companies. This growing interdependence, combined with a severe shortage of cybersecurity talent (estimated at ~4.8 million persons in 2024), is driving rapid growth in the cybersecurity automation market. This market is projected to grow at a CAGR of 34%–45% from 2033 to 2029, reaching $322 billion by 2033.

Cybersecurity Automation Market

Cybersecurity SOCs rely on speed, precision, and resilience as they process over 10,000 daily security alerts. Thus, implementing agentic AI transforms them from reactive units to intelligent, adaptive defense systems that autonomously detect, assess, and respond to threats, thereby enhancing the efficiency and effectiveness of security operations. Additional cybersecurity use cases are emerging around continuous security validation through pattern matching, protecting unstructured data, identity management, and automated code security.

Further, as competition intensifies, businesses will be judged by their AI maturity relative to their competitors. Therefore, benchmarking provides a powerful lens; by measuring readiness, companies can pinpoint where they lead, where they lag, and where investments will create the greatest positive impact. This not only highlights capability gaps but also drives data-driven, focused, sector-relevant AI strategies designed for customer value.



Size, by Component, 2023-2033 (USD Billions)
Source: Third party research, 2025

Agentic AI Readiness Within Semiconductors

In semiconductors, readiness hinges on efficiently managing complex supply chains and manufacturing processes. Agentic AI, when integrated with Enterprise Search platforms, transforms how organizations harness their data. Enterprise Search unifies fragmented information across systems, while agentic AI adds semantic understanding and autonomous reasoning, enabling context-aware insights that optimize workflows, predict equipment failures, and elevate quality control. Together, they turn vast, scattered data into a proactive intelligence engine for operational excellence.

Agentic AI is being used for autonomous chip design, as it can generate and evaluate hundreds of prototypes, optimizing designs for material use and manufacturability. Additional semiconductor use-cases include process monitoring to improve manufacturing efficiency, real-time anomaly detection in lithography to reduce defects, and predictive defect management, transforming quality control from reactive to proactive.

However, semiconductor companies seeking to integrate agentic AI must first build a robust data infrastructure that unifies corporate data and expert knowledge into an enterprise-wide repository, supported by strong data and governance frameworks. At the same time, they need to upskill their workforce to design, develop, and deploy AI solutions that fully leverage agentic architectures, while fostering a cultural shift centered on business outcomes, responsible AI, and rapid functional transformation for quick wins.

Many pilots fail not because AI "doesn't work" but because enterprises struggle to embed it into everyday workflows. The real challenge is closing the learning and adoption gap. Organizations must dedicate as much effort to change management, process design, and user training as they do to developing the technology itself. Without redesigning processes, AI adoption often becomes like "a Peloton bought in January and used as a coat rack by March." You didn't fail at fitness; you failed at follow-through.

By reimagining and streamlining processes to enhance efficiency and reduce friction, companies can create the foundation for effective AI integration. They should then identify high-impact AI use cases across the value chain, from core operations such as supply chain, manufacturing, and R&D to enabling functions like finance and HR, to ensure that adoption leads to real impact rather than stalled initiatives.

Key Takeaways

1. **Readiness Gap Is Significant:** Only 35% of companies meet the minimum foundational requirements for successful agentic AI, indicating a major gap between reported readiness and actual infrastructure.
2. **High Failure Rate, Low ROI:** 95% of generative AI projects are failing to deliver a measurable return on investment (ROI), often due to weak technical foundations rather than the technology itself.
3. **Concerns Are Skyrocketing:** Concerns over AI deployment costs have increased 18% since 2023, anxiety about response accuracy has grown 8x, and data security concerns are up 3x.
4. **Rushing Advanced Features:** Software and cybersecurity companies are prematurely pursuing advanced agentic AI capabilities (such as 'Technical Interrogation,' implemented by only 39%) without mastering basic digital experience essentials (like e-commerce essentials, implemented by 65%).
5. **Foundation First for Success:** Achieving agentic AI success requires prioritizing three strategic pillars: Data foundations (pipelines, security, scalability), core capabilities (distinguishing automation from true AI), and robust execution (ROI frameworks, organizational alignment).

About Alvarez & Marsal

Founded in 1983, Alvarez & Marsal is a leading global professional services firm. Renowned for its leadership, action, and results, Alvarez & Marsal provides advisory, business performance improvement, and turnaround management services, delivering practical solutions to address clients' unique challenges. With a worldwide network of experienced operators, world-class consultants, former regulators, and industry authorities, Alvarez & Marsal helps corporates, boards, private equity firms, law firms, and government agencies drive transformation, mitigate risk, and unlock value at every stage of growth.

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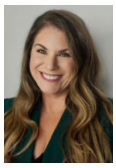
About Lucidworks

Lucidworks transforms complex data into actionable insights through AI-powered search and product discovery solutions. Clients achieve 391% ROI and are 2.5 times more likely to successfully deploy AI initiatives. Global leaders like Lenovo, Morgan Stanley, and American Express rely on Lucidworks to power digital experiences that drive business results. Learn more at **Lucidworks.com**.

Mike Sinoway
Chief Executive Officer



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