



Top 12 Disruptors for 2026

Navigate the next wave of emerging technology and trends.

Twelve disruptors are changing enterprise technology. Move now to capture new value, deepen client trust and secure long-term leadership — or risk falling behind. Understand these trends to adapt your offerings and stay ahead.

Explore the [Gartner AI Vendor Race Hub](#) for exclusive insights, benchmarking and strategy to outpace disruption and lead the market.

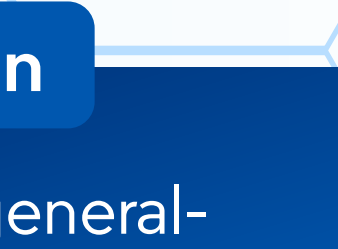
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Gartner AI Vendor Race Hub

The era of the AI generalist is over

1. Domain language models

AI models created for the needs of specific industries, business functions or problems



The challenge

By 2028, “one-size-fits-all” generalist AI will fail to scale for enterprises, driving a shift away from broad large language models (LLMs) toward precise, specialized domain language models (DLMs) to solve specific business problems.

Take action

Pivot from general-purpose LLM strategies to specialized multimodal domain architectures.

2. Agentic compass

Frameworks that guide and prioritize agentic AI use cases to deliver value



The challenge

By 2029, over 70% of enterprise agentic AI initiatives will fail due to executive “agent-washing” and opaque machine reasoning that undermines human trust.



Take action

Support sustainable agentic AI progress by roadmapping your obstacles and addressing tension points early.

Paradoxes undermining agentic AI success

Complexity–Comprehensibility Gap

More complexity reduces transparency, eroding human trust.

Volatility–Verifiability Conflict

Volatility demands autonomy but hinders verifying agent behavior.

Autonomy–Accountability Paradox

Greater autonomy increases responsibility but complicates accountability.

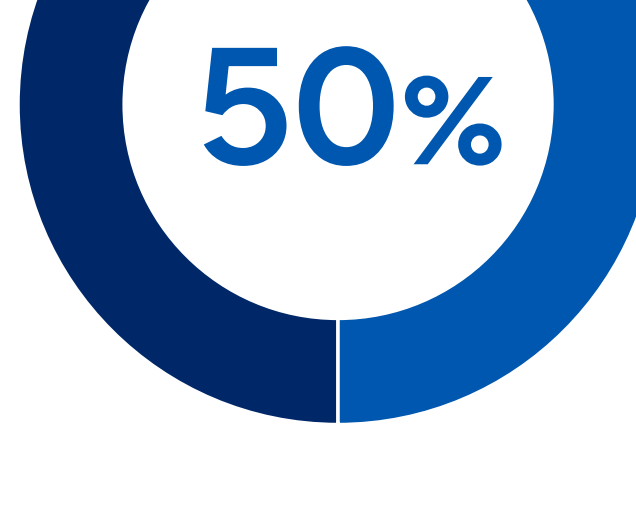
3. Disaggregated applications

GenAI creation of ephemeral applications perfectly suited to every required action



The challenge

By 2029, traditional software will be upended as over 50% of enterprise users bypass traditional enterprise applications in favor of multimodal, GenAI-composed intent engineering interfaces, forcing enterprises to completely rethink technology investments.



Take action

Replace legacy software workflows with GenAI-composed solutions.

Physical AI: The new frontier

4. Industrial AI

Domain-specific models applied to manufacturing, operations, predictive maintenance and engineering workflows



The challenge

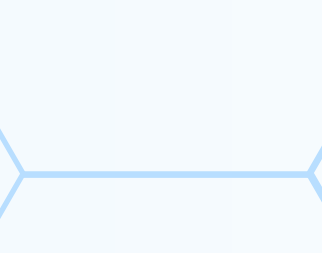
By 2030, as human labor and traditional machines are relegated to supporting roles, industrial AI — deployed via smart robots, vehicles and IoT — will become the dominant approach for global logistics, production and maintenance.

Take action

Seamlessly integrate AI with the physical world by deploying smart robots, drones, vehicles and IoT to autonomously drive global production and maintenance.

5. Autonomous drone operations

Uncrewed aerial systems that can autonomously execute complex missions using sensing, real-time decisions and adaptive control



The challenge

By 2030, to overcome the logistical inefficiencies of reaching previously inaccessible locations, autonomous drones will be fully embedded into everyday enterprise operations, creating a new low-altitude economy.

Take action

Embed autonomous drones as default tools across agriculture, law enforcement and enterprise logistics to monitor and move everything in a new low-altitude economy.

6. Low-power AI

Sustainable AI that reduces power use and enables more efficient model training and inference



The challenge

Expensive, power-hungry GPUs are driving an AI energy crisis that hardware improvements alone cannot solve. By 2030, to sustain AI development, enterprises must pivot to ultra-efficient on-device AI capable of running massive models on less than 1 mW, rendering cloud processing an unnecessary extravagance.

Take action

Develop smaller, highly efficient on-device AI models (like TinyML for microcontrollers) that consume minimal power without the need for cloud processing.

The biggest challenges met

7. Wicked intelligence

AI designed to address “wicked problems” defined as complex, evolving and high-uncertainty challenges



The challenge

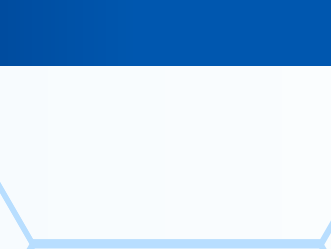
By 2030, technology providers will pivot investments away from artificial general intelligence (AGI) and toward “wicked intelligence” to solve complex, adaptive societal and corporate problems (like climate change) that humans and AGI cannot solve.

Take action

Invest in wicked intelligence instead of AGI to deploy iterative and adaptive solutions specifically targeted at complex societal and corporate problems.

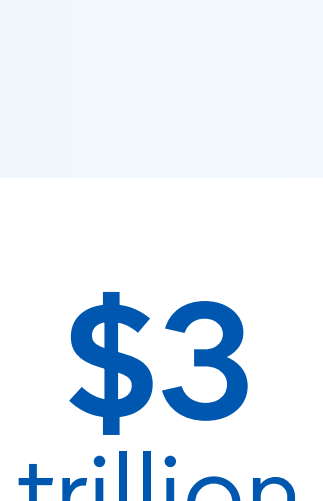
8. Earth intelligence

Application of AI to Earth observation data — gathered from satellites, sensors and other geospatial sources — to feed domain-specific AI models



The challenge

By 2030, Earth intelligence will generate more than **\$3 trillion** in value, impacting every activity on the surface, and above the surface, of the Earth. Businesses must find new ways to unlock value and compete across physical activities on and above the Earth’s surface.

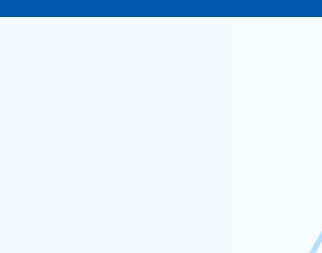


Take action

Use Earth intelligence to deliver wide-ranging value for any enterprise to see how.

9. Synthetic data

Artificially generated data used as a proxy for real data across AI and testing use cases



The challenge

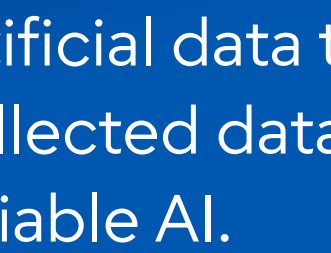
Real-world data often carries bias, noise and quality issues that hinder AI reliability and brand trust. By 2030, trustworthy, clean, bias-free synthetic data for enterprise simulation will surpass real data as the new gold standard.

Take action

Make synthetic data engineering a competitive advantage. Use clean, bias-free, fully artificial data to augment collected data and build reliable AI.

10. Intelligent simulation

Use of digital technologies to model real-world systems and possible scenarios for better decision making



The challenge

By 2030, because AI will fail at scale without it, intelligent simulation will become the backbone of all human and machine decision making, serving as a primary differentiator for 20% of organizations.



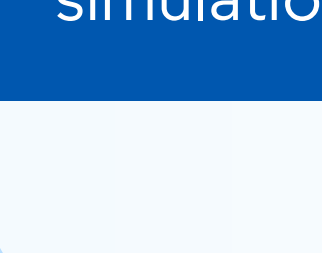
Take action

Model what-if scenarios of both physical and digital process systems at unprecedented scale and accuracy. Accelerate business decision-making processes based on simulation.

Weaponization of AI

11. Global attack surface grid

The totality of digital and physical systems that encompass all potential entry points for cyber threats worldwide



The challenge

By 2029, the unchecked weaponization of AI targeting autonomous systems will expand the attack surface into the real world, threatening severe physical damage and costing the global economy **\$30 trillion**.



Key threats

Physical damage

Industrial robots destroying property, drones falling from the sky

Safety risks

Medical robots harming patients, autonomous power grids causing blackouts

Environmental impact

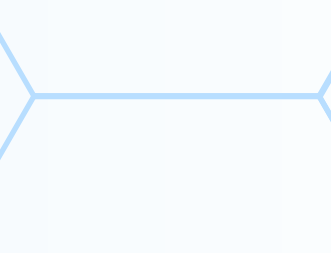
Critical infrastructure being manipulated to cause environmental disaster

Take action

Invest in cyber-kinetic security to actively defend against physical and autonomous threats stemming from the expanding global attack surface.

12. Digital trust and authenticity platforms (DTAP)

Platforms designed to disrupt the disinformation supply chain and rebuild trust in digital content



The challenge

By 2030, eroding digital trust will threaten the global economy, forcing enterprises to spend over **\$25 billion** on platforms to inspect and verify the identity and origin of digital assets.

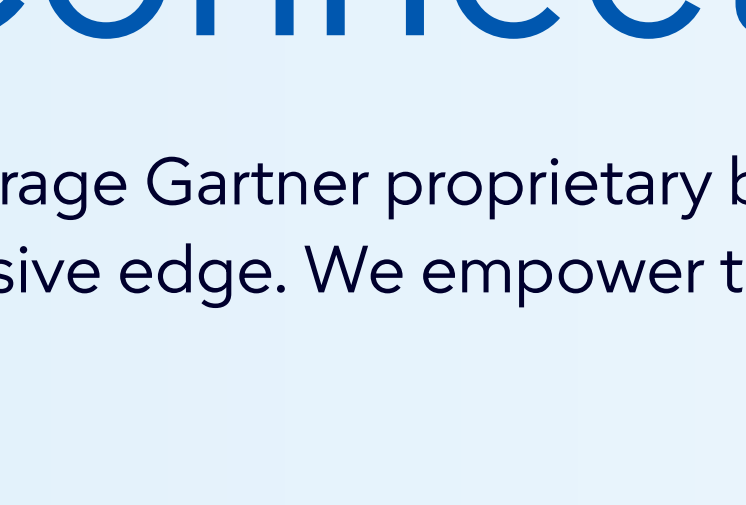


Take action

Adopt DTAP to inspect and verify the identity, intent and origin of digital assets, restoring trust in enterprise content.

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