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EXECUTIVE SEARCH • MANAGEMENT CONSULTANTS

LATEST EMERGING TECHNOLOGY TRENDS FOR 2026



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01

UNDERSTANDING FUTURE TECH TRENDS 2026: WHAT EVERY ORGANISATION NEEDS TO KNOW

By 2030, AI will contribute \$15.7 trillion to the global economy, yet most organisations remain unprepared for the transformation already underway. The 2026 tech environment is a watershed where artificial intelligence has moved from experimental curiosity to business imperative. This intersection of physical and digital worlds creates unprecedented opportunities - but for organisations navigating this complexity, understanding emerging tech trends 2026 is essential for maintaining competitive advantage.

Leaders who act decisively now will be better positioned to align digital strategy with enterprise goals, scale AI securely and responsibly, and navigate geopolitical and regulatory complexity with confidence.

Leading organisations are structuring their technology initiatives around three critical themes, as identified by Gartner, that define how they innovate, compete, and protect value.

The Architect organisation focuses on building secure, scalable foundations through AI-native development platforms, AI supercomputing infrastructure, and confidential computing that protects sensitive data whilst enabling secure AI deployment across untrusted infrastructure.

The Synthesist business emphasises combining specialised capabilities through multi-agent systems, domain-specific language models, and physical AI that brings intelligence into real-world operations through robots, drones, and smart equipment.

The Vanguard company prioritises security and governance through preemptive cybersecurity, digital provenance, AI security platforms, and geopatriation strategies that navigate data sovereignty requirements in an increasingly multipolar world.

Key Insight: AI is No Longer Optional

In 2026, disruption is accelerating and AI has become essential infrastructure. These trends reflect how leading organisations respond to complexity and opportunity in an AI-powered, hyperconnected world, moving from reaction to strategic reinvention.





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LATEST EMERGING TECHNOLOGY FOR IT: AI-POWERED DEVELOPMENT AND INFRASTRUCTURE

AI-native development platforms are revolutionising software creation. Small, nimble teams can now build sophisticated applications using generative coding tools that speed development cycles whilst maintaining enterprise-grade quality. Developers write, test, and deploy code with unprecedented speed, though human oversight remains essential to verify quality and security.

Supporting this revolution, hyperscale AI data centres pack powerful computer chips into synchronised clusters functioning as giant supercomputers. However, these facilities consume enormous energy. Data centres accounted for 4% of global energy consumption in 2024, predicted to double by decade's end.^[1] This reality is driving an urgent focus on renewables, alongside new solutions including hydrogen fuel cells and small modular nuclear reactors.

Next-generation nuclear power, particularly SMRs, offers steady, emissions-free energy in compact formats. With reactor cores just two metres tall, these modular systems can be deployed flexibly for military bases, remote sites, or industrial facilities. Meanwhile, sodium-ion batteries made from abundant materials like salt are emerging as cheaper, safer alternatives to lithium, supporting both grid storage and affordable electric vehicles worldwide.

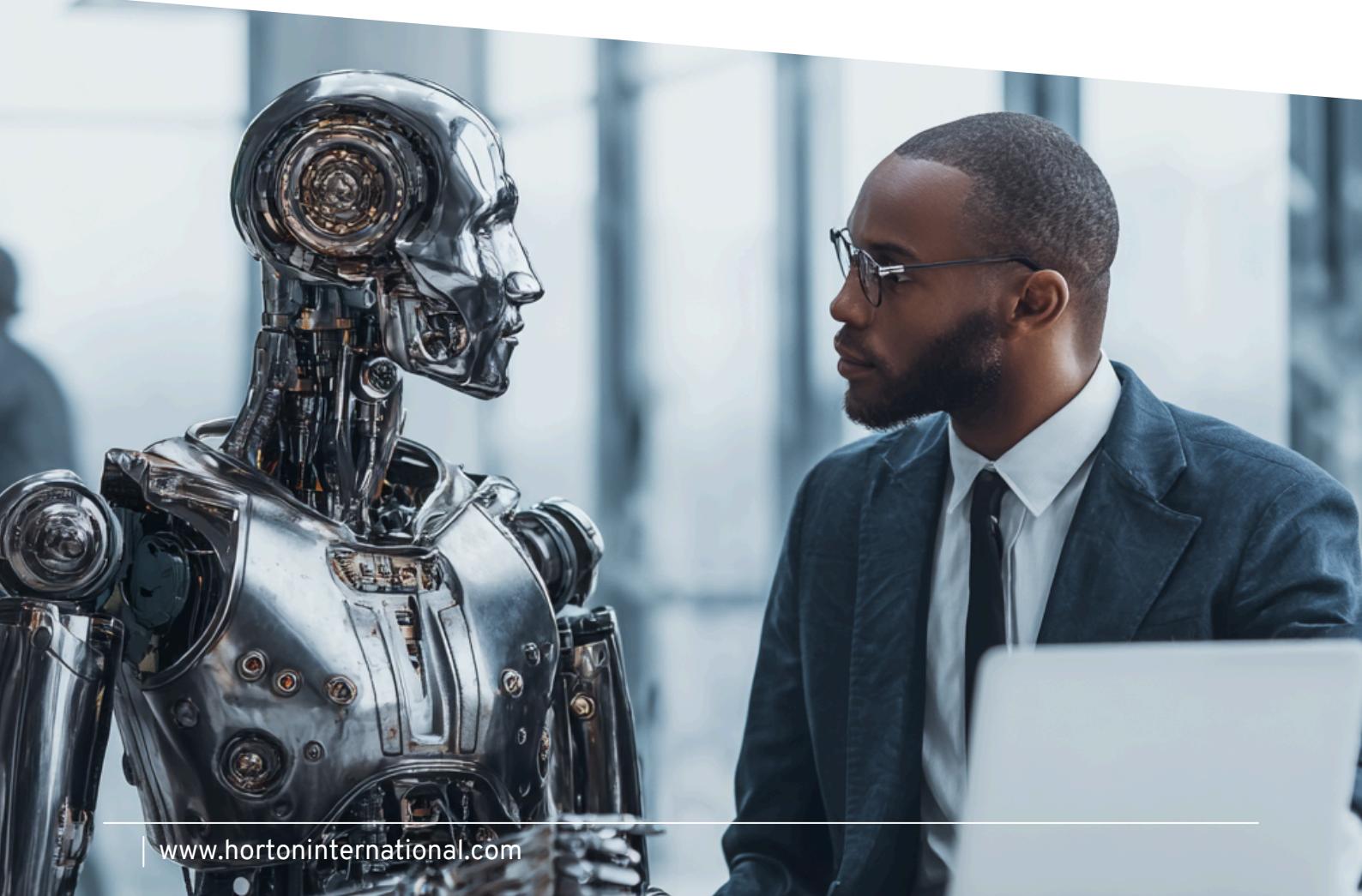
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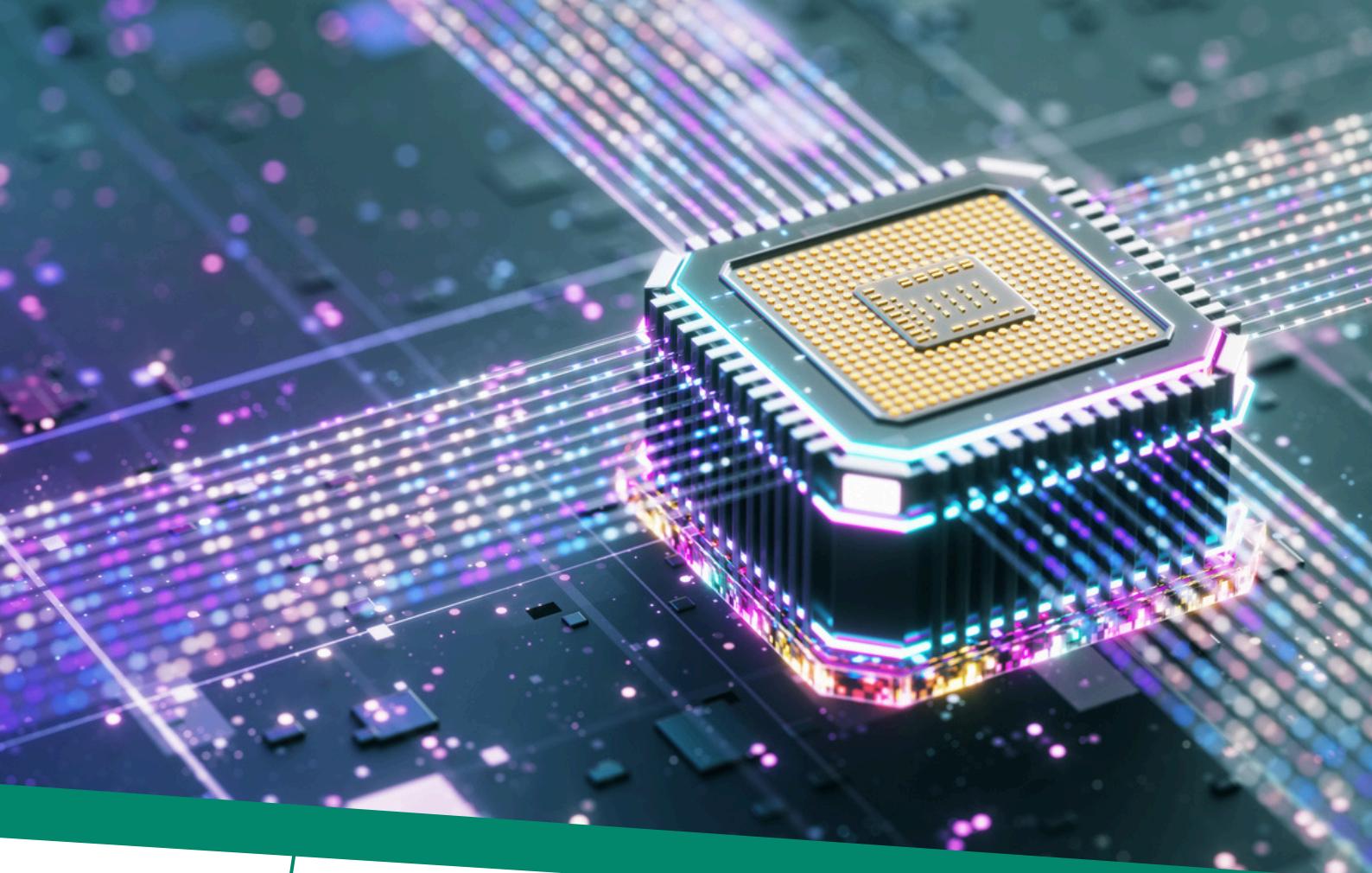
THE AGENTIC REVOLUTION: MULTI-AGENT SYSTEMS TRANSFORM WORK

If 'agents' were 2025's buzzword, 2026 is when they become everyday reality. Multi-agent systems deploy modular AI agents that collaborate on complex tasks, taking action on our behalf rather than simply answering questions. From automating business decisions to coordinating schedules, AI agents handle planning and problem-solving, freeing humans for higher-value work requiring creativity and strategic thinking.

These systems excel at tasks requiring coordination across multiple specialisations. Customer service workflows might involve agents specialising in language understanding, database queries, policy interpretation, and response generation working seamlessly together. In supply chains, multiple agents collaborate to optimise routing, manage inventory, predict demand, and coordinate suppliers.

Domain-specific language models complement this by delivering higher accuracy for industry applications. Unlike general-purpose AI, these specialised versions understand sector-specific terminology and regulations eg medical privacy requirements or financial compliance frameworks. They typically require less computational power and pose reduced risks around inappropriate/hallucinatory responses.





05

PHYSICAL AI AND QUANTUM COMPUTING: BRIDGING DIGITAL AND REAL WORLDS

Physical AI brings intelligence into real-world environments, enabling robots and autonomous systems to perceive, reason about, and act within physical spaces. Manufacturing robots adapt to material variations, agricultural drones monitor crop health and perform targeted interventions, and warehouse systems transform logistics operations. What distinguishes physical AI from traditional automation is its ability to handle uncertainty and real-world variability rather than requiring precisely controlled conditions.

Meanwhile, quantum computing is transitioning from laboratory promise to business reality. Harnessing sub-atomic particle behaviour to accomplish complex tasks millions of times faster than classical computers, quantum systems may enable more accurate financial risk assessment, accelerate drug discovery with reduced clinical trial costs, and are already optimising logistics routing. This computing paradigm represents a leap comparable to the transition from valve-based computers to microprocessors ... with potentially similar impact on our lives.

06

SECURITY, TRUST AND THE HUMAN FACTOR IN AN AI-POWERED WORLD

As AI becomes ubiquitous, establishing trust grows critical. Preemptive cybersecurity moves beyond reactive defence, using AI and analytics to anticipate and neutralise threats before they cause harm. However, most breaches still exploit human vulnerabilities, meaning technology alone cannot solve security challenges. Organisations must combine preemptive measures with education, awareness programmes, and security-focused cultures.

Potentially, digital provenance will create verifiable records of content origin and modification history, helping users distinguish authentic from AI-generated content. AI security platforms address unique vulnerabilities from AI adoption, including adversarial attacks and data poisoning. Research in mechanistic interpretability is revealing how large language models actually work, enabling better assessment of reliability and identification of bias.

Key Insight: The Human-AI Balance

Millions interact with AI chatbots daily, some forming close bonds with bots. As technology approaches human-level abilities in narrow domains, 2026 demands renewed focus on qualities that set us apart: authenticity, emotional intelligence, teamwork, inspirational leadership, and long-term strategic thinking. Attributes that can't be generated by entering prompts.





07 NAVIGATING GEOPATRIATION AND GLOBAL COMPLEXITY

Key Insight:

Geopatriation migrates applications from public clouds or spaces back to your own infrastructure, which can either be located on-premises or hosted by a data centre provider. The main purpose of geopatriation? To remove reliance on the public cloud /host provision, often outside a company's national boundaries.

Geopatriation reflects increasing national requirements that data, computing resources, and technology infrastructure remain within borders or aligned with geopolitical interests. This trend creates complexity for global organisations.

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FROM REACTION TO REINVENTION: STRATEGIC IMPLICATIONS

By 2026, we're getting answers to big questions about AI's effect on jobs, business, and daily life. The focus shifts from reacting to reinventing and reshaping to find our place in this transformed world. In healthcare, this means implementing proven solutions that impact real lives. In media and marketing, building systems that leverage new paradigms rather than resisting them.

For recruitment and strategic consultancy professionals, these trends reshape the talent landscape. Technical skills remain important but are increasingly augmented by AI tools, shifting emphasis towards system design, AI collaboration, and strategic thinking. Meanwhile, uniquely human skills including emotional intelligence, ethical reasoning, and creative problem-solving become more valuable.

Emerging roles reflect this transformation. Most likely organisations will seek:

- Chief AI Officer / Head of AI / AI Strategy Manager to align Business Strategy and AI Use Cases
- AI Product Manager to develop AI based products
- AI Ethics Officers / AI governance manager to ensure responsible deployment
- Multi-Agent Orchestration Managers who design collaborative AI workflows
- Lead of AI Learning / AI task forces to build up AI competencies

Traditional roles are evolving too: data scientists need confidential computing expertise, cybersecurity professionals require preemptive threat modelling skills, but also HR Managers, Controllers must master AI-native platforms. Questions around AI security, data sovereignty, and ethical use requiring thoughtful frameworks and experienced leadership.



CONCLUSION

EMBRACING TRANSFORMATION WITH CONFIDENCE

The latest emerging technology for IT, AI specific, shows accelerating transformation. AI has moved from optional to essential. Physical and digital worlds converge. Computing paradigms shift. Energy systems are reimagined. Human skills are revalued.

Success requires translating technological trends into business implications, identifying needed talent and capabilities, and guiding transformation with confidence. The year ahead challenges leaders to rethink technology use whilst safeguarding what makes us human. By understanding these forces and acting early, we can shape a future where AI and emerging technologies amplify creativity, resilience, and progress rather than overwhelm them.

Three Critical Actions for Leaders This Quarter

- 1. Assess Your AI Readiness:** Audit current AI capabilities and identify gaps in infrastructure, talent, and governance. Which business processes could benefit from multi-agent systems or domain-specific models?
- 2. Build Your Talent Pipeline:** Begin recruiting for emerging roles now. AI ethics officers, prompt engineers, and quantum specialists are in short supply. Invest in upskilling existing teams on AI collaboration and preemptive security practices.
- 3. Establish Governance Frameworks:** Develop clear policies for AI security, data sovereignty, and ethical use before scaling deployment. Cross-functional teams should jointly define risk tolerance and compliance requirements.

Organisations that thrive will embrace these trends with strategic intent and careful execution, building foundations that enable long-term success whilst leveraging technology to empower their people. With secure, scalable infrastructure, combined specialised capabilities, and robust governance, organisations can navigate complexity and emerge stronger for whatever comes next.

Sources:

^[1] <https://www.gartner.com/en/articles/top-technology-trends-2026>

^[2] <https://www.forbes.com/sites/bernardmarr/2025/09/29/the-top-5-technology-trends-for-2026/>



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As Sector Head IT & Digitalisation at Horton International since 2015, Monika Becker brings over two decades of executive search expertise to one of the industry's most dynamic and transformative sectors. She specialises in filling executive and key roles across AI & Analytics, ERP and Cybersecurity, with particular focus on C-level positions and leadership roles in Sales & Marketing, Product, Finance and HR.

Monika's career in executive search began in 2001, building on earlier experience as an organisational development consultant in a boutique consultancy. This foundation has proven invaluable in her work with scale-up companies and organisations navigating transformation, where understanding both talent and organisational dynamics is essential.

A passionate advocate for diversity in technology, Monika actively supports initiatives aimed at broadening representation within the IT industry, recognising that diverse leadership teams drive better innovation and business outcomes.



Dr. Monika Becker

Director Digital & Technology,
Sector Head IT & Digitalisation
Horton International Germany