ALLPROS WEBINAR

Emerging Technologies that will shape the future

of the semiconductor industry in Europe

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Agenda

- (10m) Emerging Technologies today
- (10m) Emerging Technologies Partners
- (10m) Semiconductor industry impact
- (20m) Expert Analyst Interview
- (10m) Q&A

Executive Summary

Emerging Tech Landscape

IDC's 2025 radar identifies 44 innovations shaping Europe, with AI (GenAI, Agentic AI), advanced computing, and next-gen connectivity leading adoption and investment priorities.

Investment Trends

European firms remain cautious with 92% allocating ≤30% of IT budgets to emerging tech, though spending above 20% is expected to rise in 2026.

Strategic Focus

EU programs channel billions into AI, semiconductors, quantum, and cybersecurity, aiming to reduce foreign dependencies and build digital sovereignty through start-up and scale-up empowerment.

Challenges & Goals

High costs, skills shortages, and security concerns persist; adoption is driven by cost efficiency, cybersecurity, and innovation, with AI delivering the best ROI and societal impact.

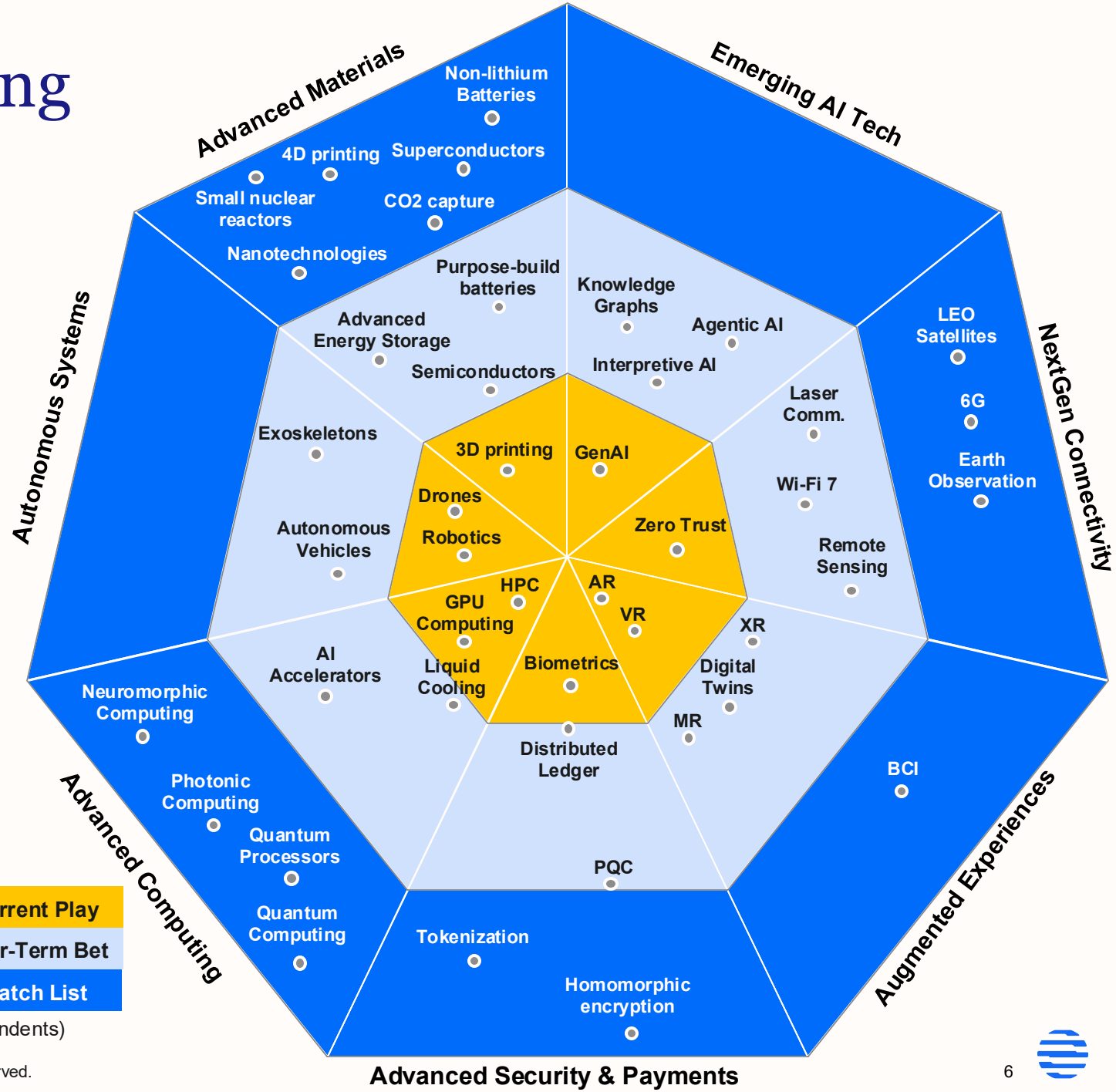
Emerging Technologies today

2025 European Emerging Technologies Radar

IDC's 2025 Emerging Tech Radar charts 44 innovations shaping Europe, ranked by adoption, maturity & impact.

It ranges through topics such as AI, connectivity, security, and more.

It tries to show what is happening now, next, and in 3/5 years.



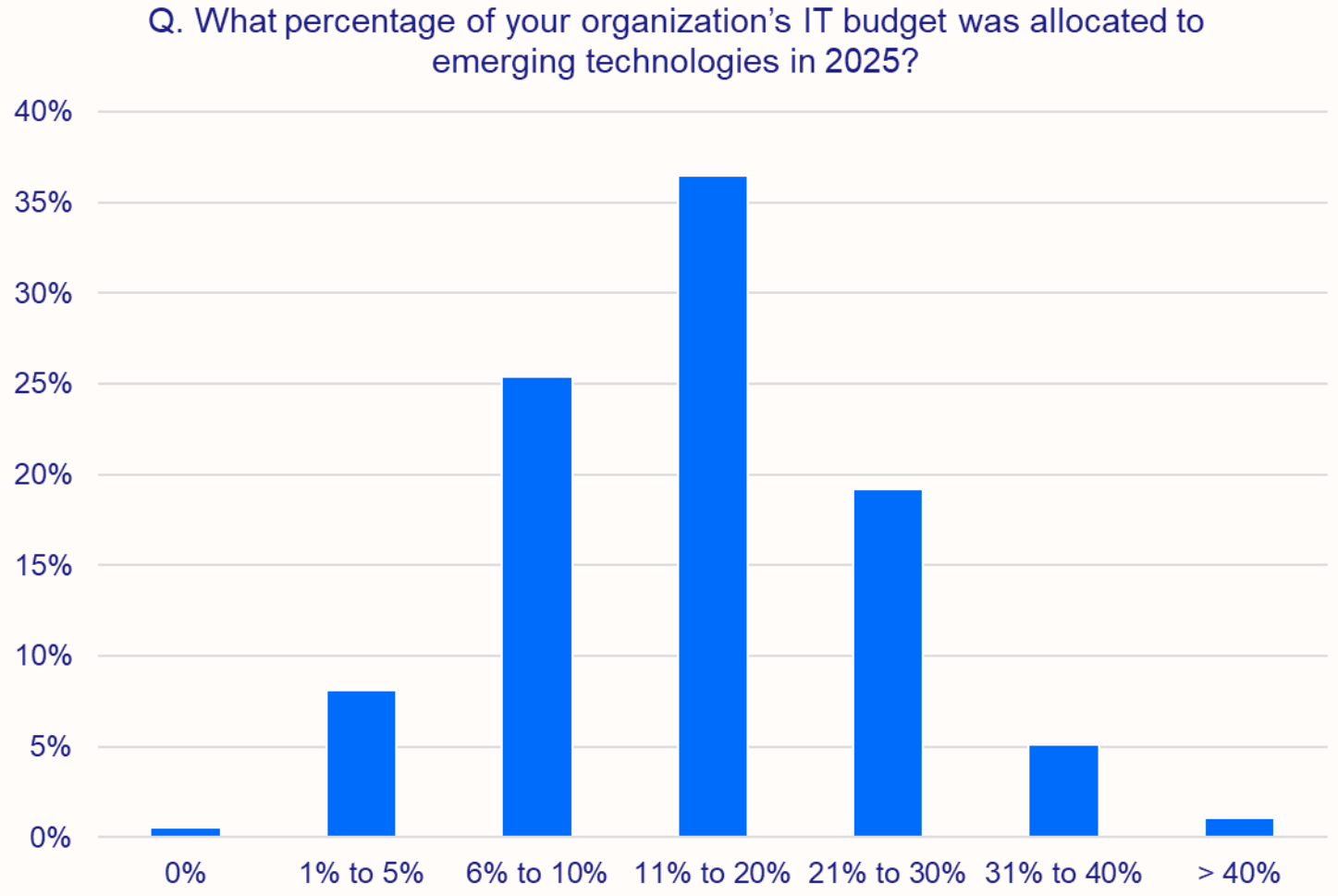
Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

IT spending priorities - EU organizations are quite conservative on emerging tech investments

European firms invest cautiously in emerging tech.

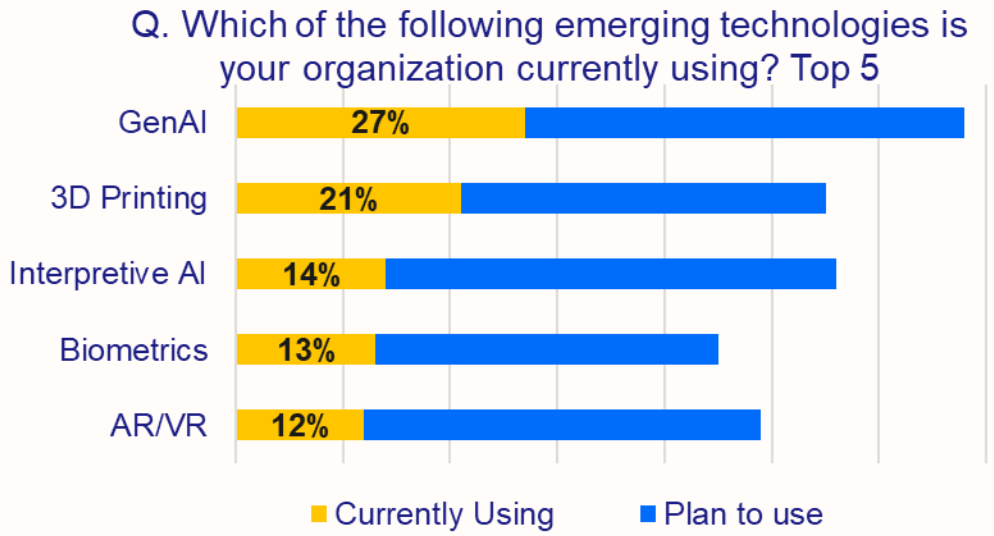
92% allocate ≤30% of IT budgets, with most spending 11–20% for pilots and scaling.

only 6% exceed 30%, though shares above 20% are expected to rise in 2026.



Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

Adoption: Current Plays and Near-Term Bets



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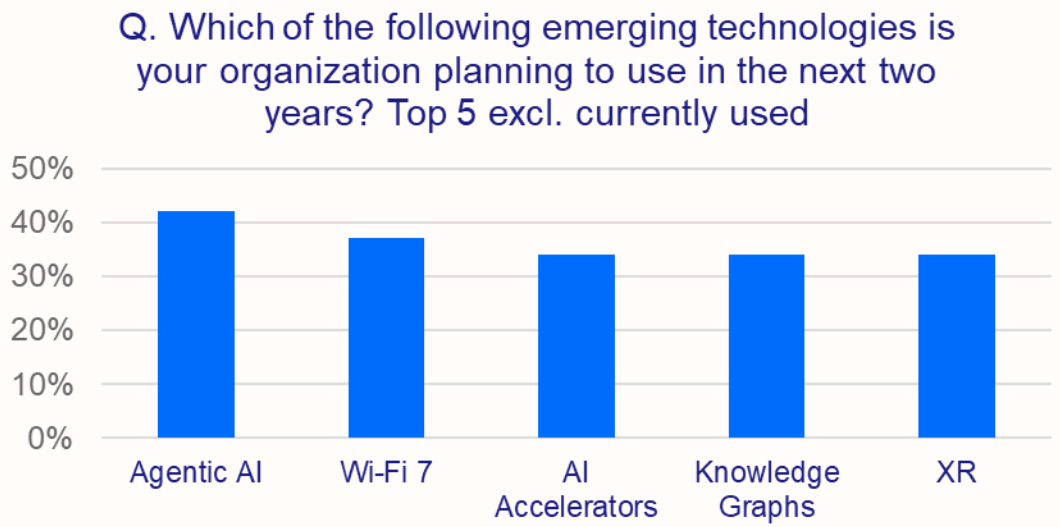
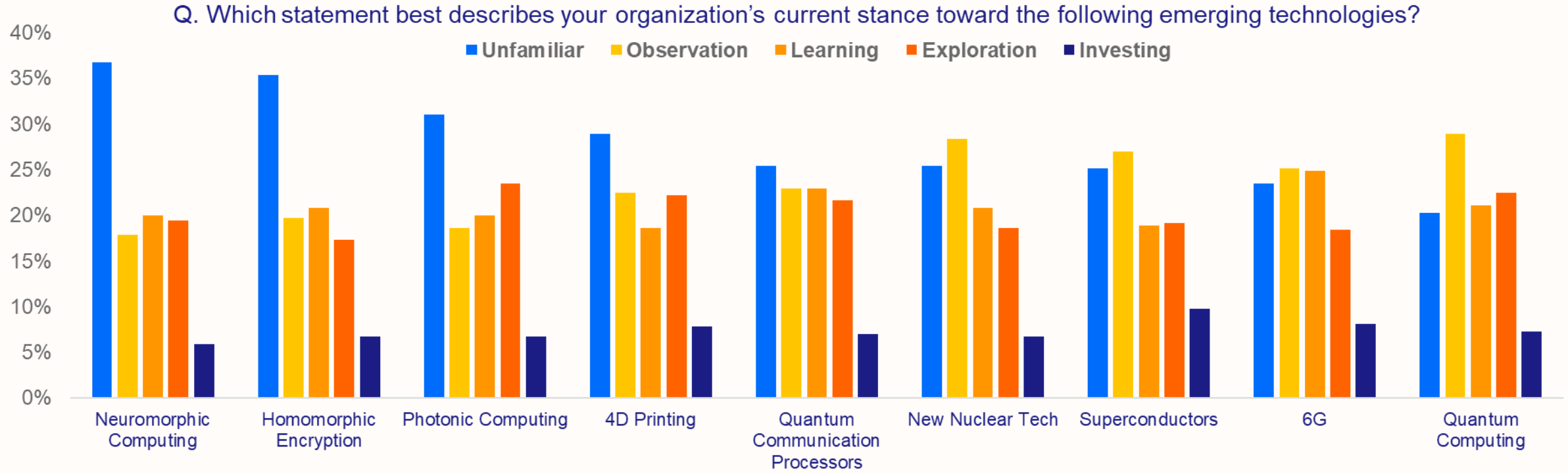


Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

Current Adoption: GenAI leads with highest uptake; strong intent for 3D printing and AR/VR, while interpretive AI and biometrics lag due to regulatory checks.

Near-Term Bets: Agentic AI, Wi-Fi 7, AI accelerators, and knowledge graphs dominate plans, signaling focus on autonomy, low-latency networking, and specialized compute.

Long-Term Bets



Most technologies remain long on promise, short on applications; firms are in "watch and learn" mode.

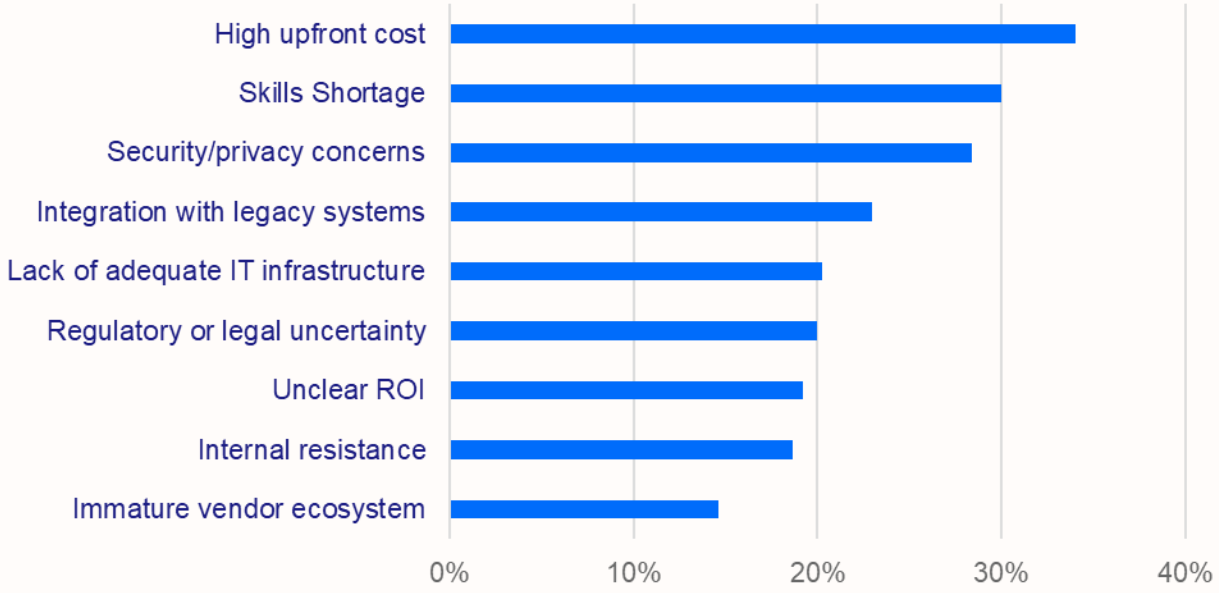
Some key highlights are:

- Quantum tech sees 25% "exploration" but only 7–8% "investment"; commercial rollout years away.
- Neuromorphic & photonic computing show steep knowledge gaps (>33% "unfamiliar"); roadmaps extend past 2030.
- Homomorphic encryption tops the "unfamiliar" list (36%), despite future compliance benefits.
- Nuclear-tech superconductors & 4D printing attract interest but face regulatory and supply-chain hurdles.

Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

Challenges: High Costs, Low Skills, and Security

Q. What are the main barriers to emerging technology adoption in your organization?



Q. What types of support or resources would most effectively help your organization accelerate its adoption of emerging technologies?

Where to focus:

- Training and upskilling to close talent gaps.
- Financial incentives and government programs to offset risk.
- Access to cloud platforms, clear standards, and industry blueprints for easier compliance.
- Stronger partner networks and cross-industry collaboration to scale adoption.

Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

Business Goals: Adoption Driven by Pragmatism and Immediate Results

Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

- **Cost & Efficiency Gains**: Automation, AI accelerators, robotics, and energy-saving infrastructure dominate priorities.
- **Cybersecurity**: Push for AI-driven threat hunting and zero-trust designs amid rising ransomware and EU data rules.
- **Growth & Market Expansion**: Digital platforms, productivity tools, and analytics enable new revenue streams.
- **Innovation & CX**: GenAI content tools and AR/VR pilots for differentiation and personalization.

Emerging technologies partners

European Tech Digital Native Businesses

Act as early adopters of emerging tech and buyers of foundational platforms, integrating cutting-edge innovations into offerings as serving as key providers driving technological advancement across Europe.

Tech Users

Leading Tech Buyers and Emerging Tech Trailblazers

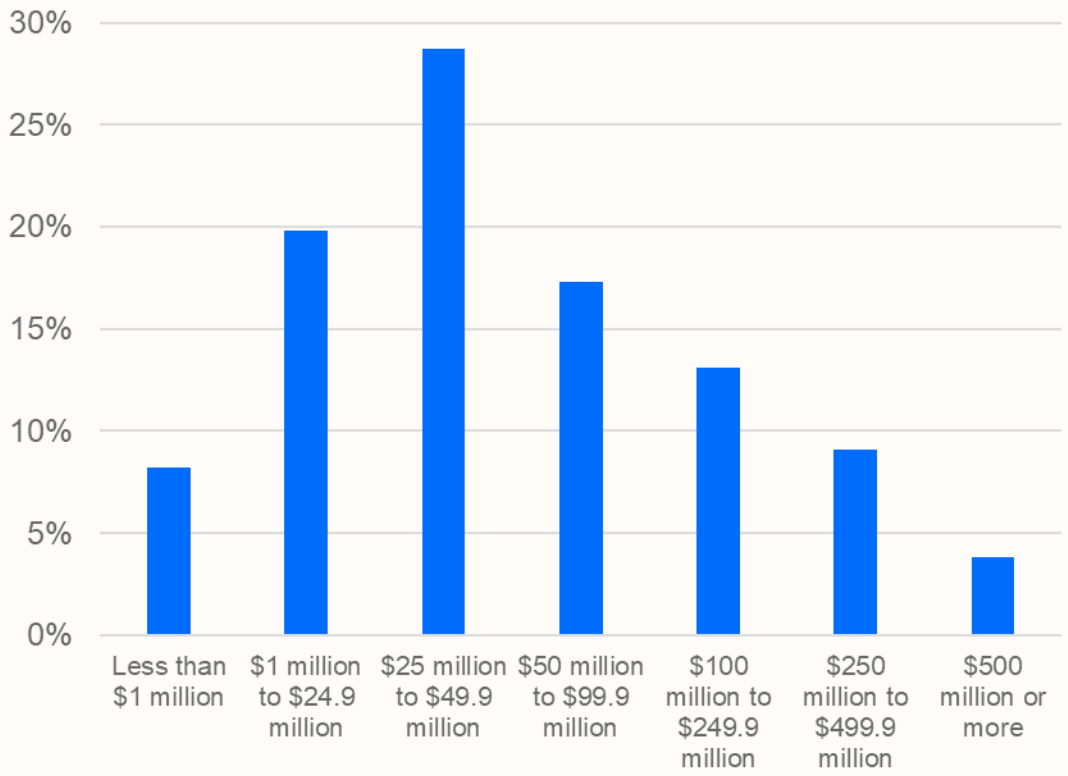
Tech Providers

Emerging Technology Providers and Innovation Enablers

Profile of European Technology Digital-Native Businesses

Funding raised by European technology DNBs

Q:How much funding has your organization received in total?



Average Organization Age (Year from Founding)

12

Top 3 Most Significant Sources of Funding
(Multiple Selection)

44% Government grants

36% Private equity (PE) funds

35% Venture capital (VC) funds

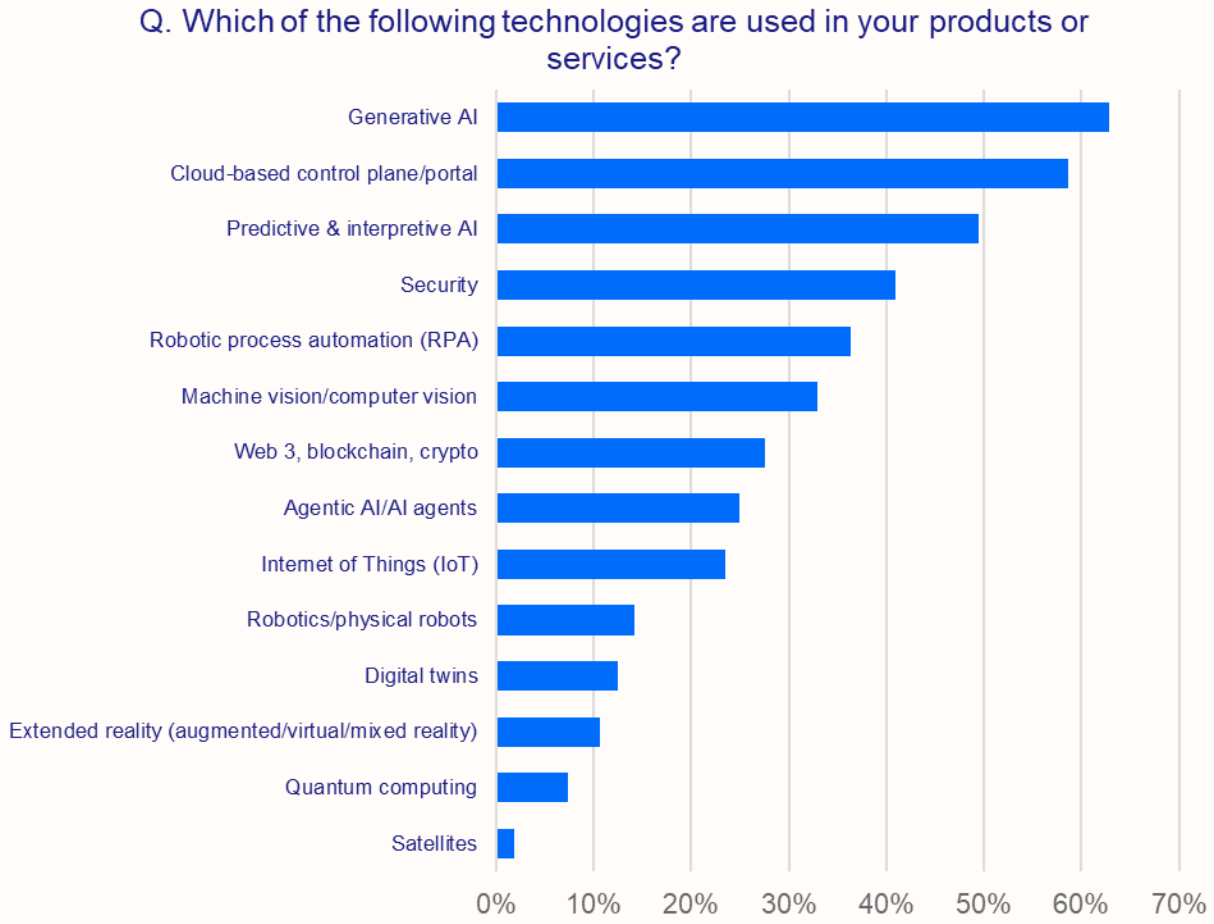
Average age: ~12 years;

mostly start-up or scale-up stage.

Funding: 50% have raised $1M-$50M;

Source: IDC's *Worldwide Digital-Native Business Survey*, August 2025 (N = 206 DNBs in Europe selling technology solutions and services)

AI and other near-term emerging technologies are the main offers for DNBs



AI Dominates Offerings

- GenAI leads adoption, classified as “Current Play” in IDC’s radar.
- Predictive, interpretive, and agentic AI sit in “Near-Term Bets,” moving from pilots toward scale-up.

Long-Horizon Tech

- Quantum computing and satellite connectivity remain “Watch Bets,” requiring heavy R&D and regulatory support.

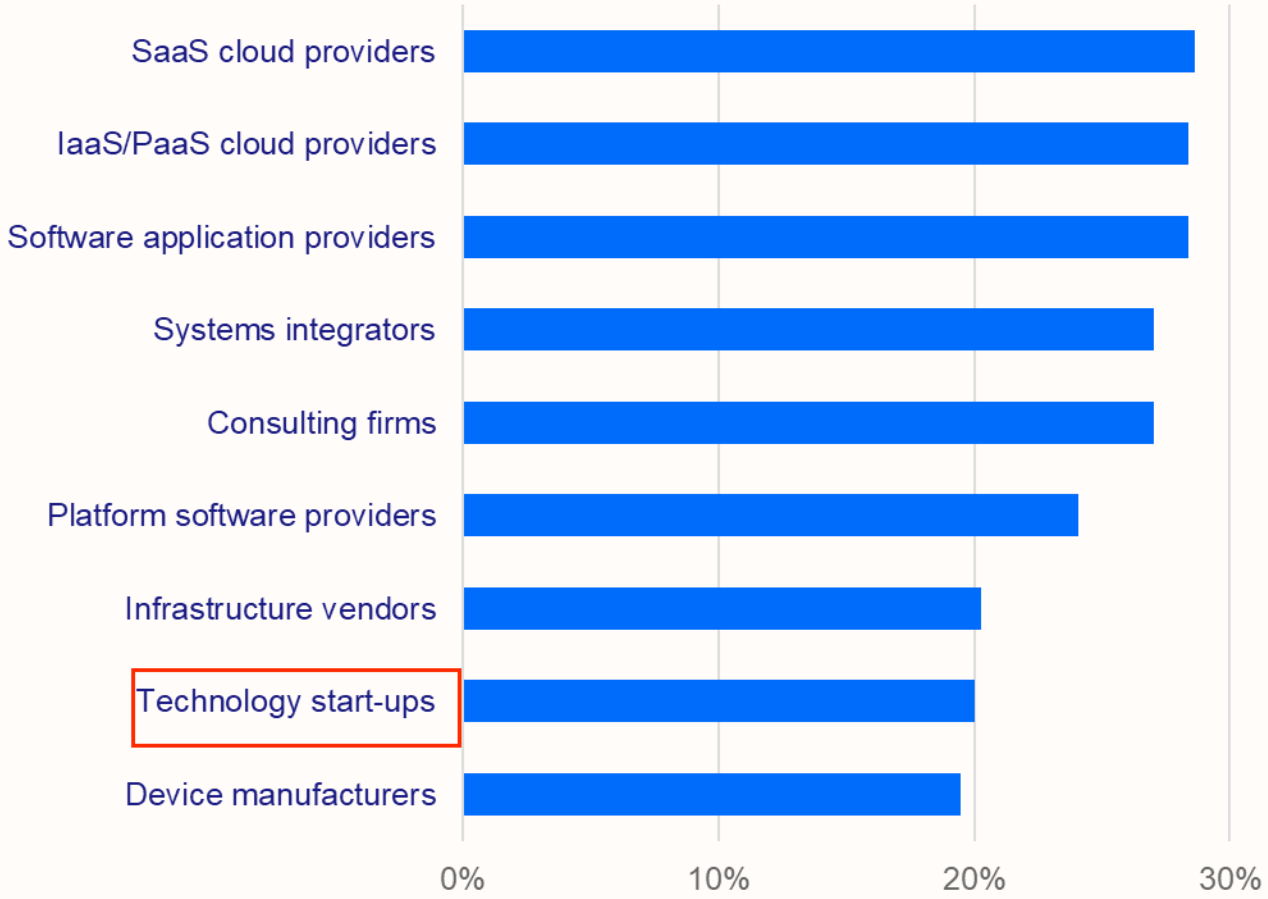
Funding Shifts

- Investor focus moves from AR/VR and Web3 toward emerging AI, slowing large-scale development in other segments.

Source: IDC’s *Worldwide Digital-Native Business Survey*, August 2025 (N = 206 DNBs in Europe selling technology solutions and services)

Competition is high for DNBs as European organizations still favor established players

Q. What vendor types are your organization's most strategic partners in terms of emerging technologies?

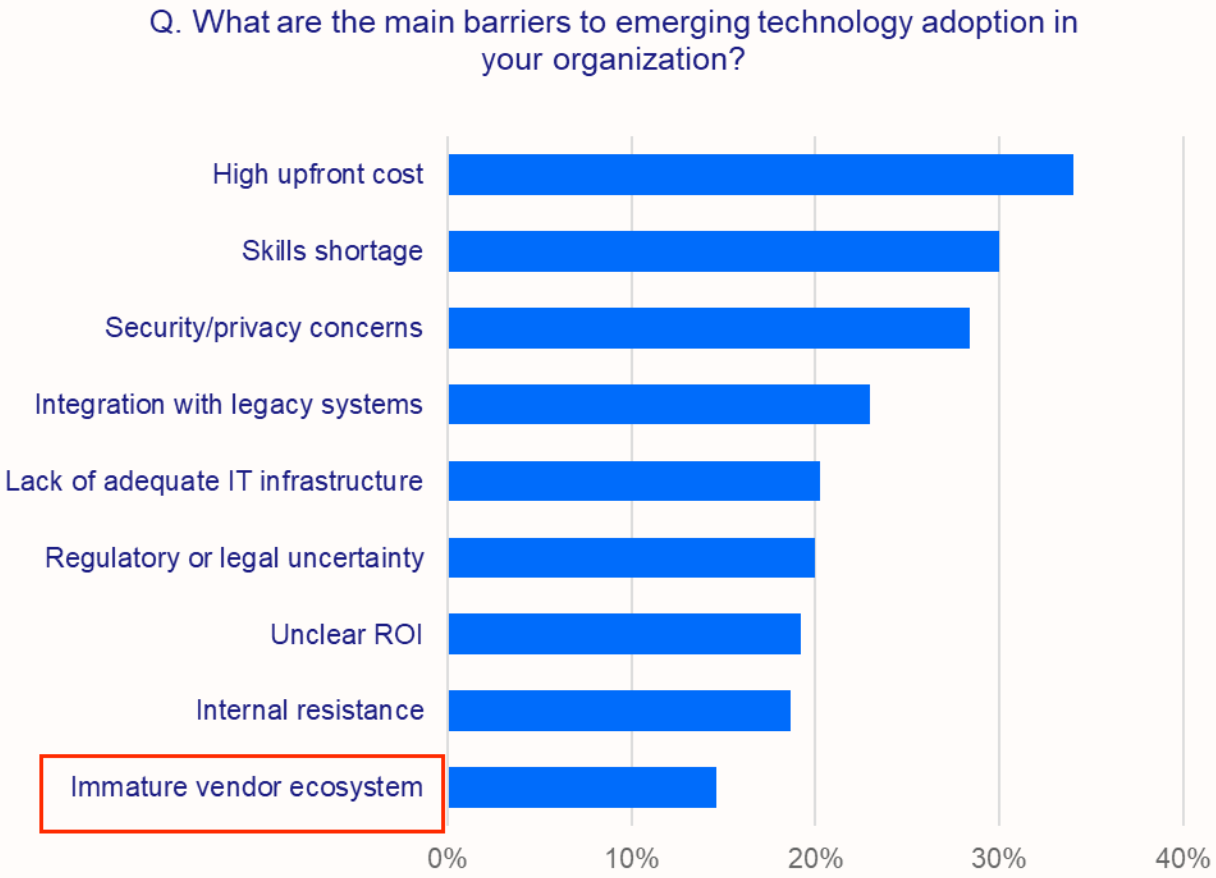


Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 respondents in Europe)

European organizations continue to favor established, large-scale providers when selecting strategic partners for emerging technology projects.

Start-ups, despite their agility and innovative offerings, present higher delivery and integration risk than seasoned suppliers.

A mature ecosystem means DNBs' competitive advantage must shift to specialization and value-add



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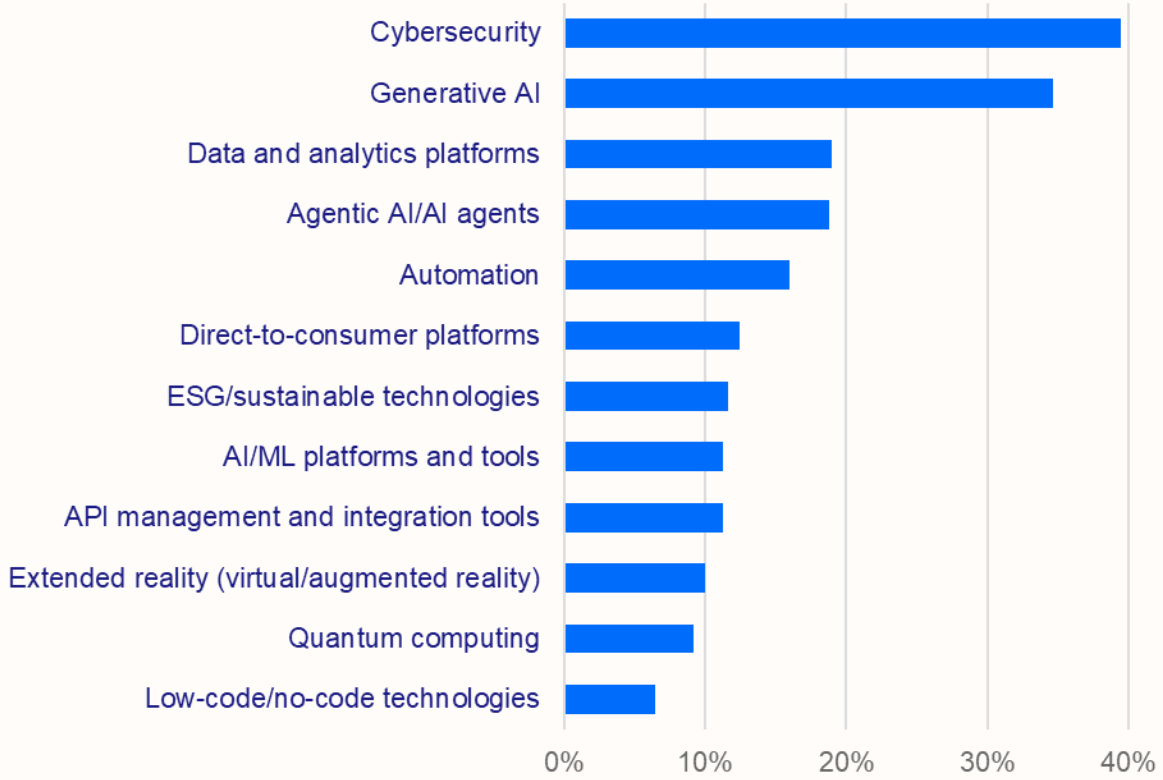
- Europe's emerging tech supplier landscape is viewed as sufficiently mature
- Helping clients integrate new solutions with legacy systems and articulating a clear return on investment are key to adoption

Technology Digital Natives Leverage Emerging Technologies for Innovation

Q. Which of the following technologies is your organization prioritizing for its IT spending over the next 12 months?



Key IT Initiatives Prioritized (Top 5)

- Security, risk, and compliance
- Workplace collaboration
- Data and AI
- Application development and deployment
- Cloud-native infrastructure development

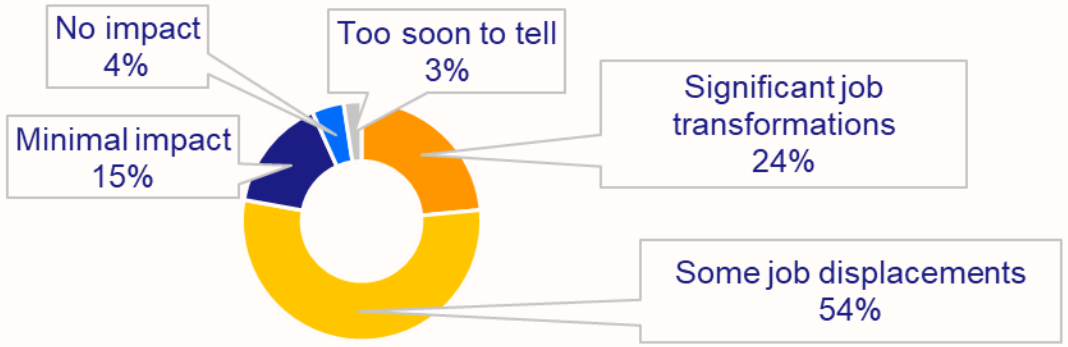
- Security, compliance, and cybersecurity are essential to ensure a safe and trusted environment.
- Robust data strategies and platforms are also critical, supporting product development, customer insights, and data-driven decision-making.
- Alongside the adoption of other emerging technologies such as extended reality and quantum computing, innovative companies are heavily investing in workplace collaboration tools, application development, and cloud-native infrastructure

Source: IDC's *Worldwide Digital-Native Business Survey*, August 2025 (N = 206 DNBs in Europe selling technology solutions and services)

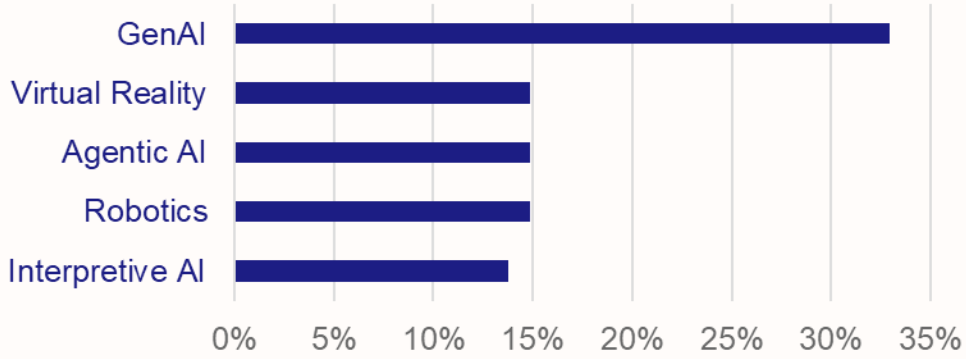
Semiconductor industry impact

Impact: ROI, Society, and Workforce Transformation

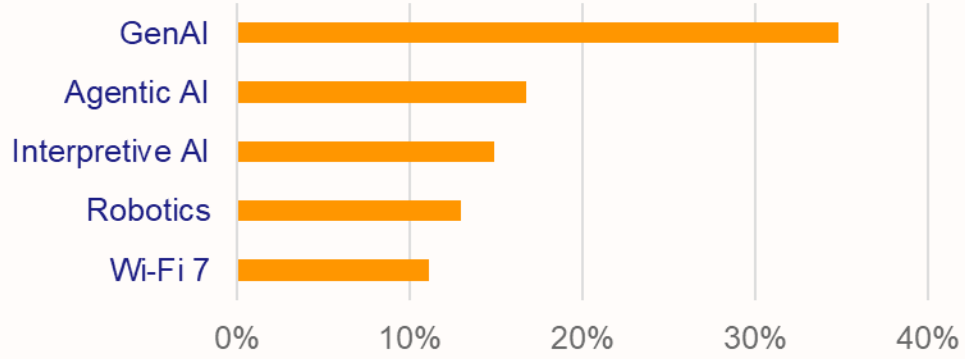
Q. How does your organization expect emerging technologies to impact your workforce in the next 3 years?



Q. Which of these technologies do you believe are most likely to significantly change people's lives by helping address current societal challenges? Top 5



Q. Which of the technologies that your organization uses or plans to use are expected to deliver the best ROI? Top 5



Workforce Disruption

- Reskilling, low-code tools, and human-AI collaboration are critical

AI as Dual Driver

- Tops "societal good" and "best ROI" lists

Other Tech Lags

- Longer payback horizons, High technical friction, Limited business and niche focus
- Regulatory and change management hurdles

Source: IDC's *Emerging Technologies Survey*, September 2025 (n = 370 European respondents)

Emerging Technologies Priorities in European Start-Up Programs

AI

- GENAI4EU: Boost GenAI in strategic sectors, including biomedical research and manufacturing
- EIC Accelerator to support disruptive AI start-ups through grants and equity investments, focusing on foundational AI, AI hardware, and scalable SaaS platforms

Defense Tech

- EUDIS Business Accelerator to boost defense start-up ecosystem
- Over 50 start-ups working on autonomous systems, AI, robotics, and sensors for defense use
- Dual-use technologies fostering innovation in cybersecurity and communication for defense

Semiconductors

- EU Chips Fund offers equity funding to semiconductor start-ups and scale-ups to strengthen local manufacturing and design capacity
- ChipStart EU incubation program for early-stage semiconductors start-ups
- Chips Design Platform (early 2026) for cloud-based access to chip design environments for fabless start-ups

Green Tech

EIC Climate-KIC supports green innovation with grants and incubator programs for cleantech start-ups focusing on sustainable energy and circular economy solutions

Space Tech

- The CASSINI initiative supports space start-ups and SMEs focused on earth observation and telecommunications
- EU Space Package and EU Space Act to boost the space economy

Quantum

EIC STEP Scale UP program investing between €10 and €30 million in SMEs to boost strategic independence in quantum tech

Source: European Commission, European Innovation Council.

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Driving Innovation: Strategic Initiatives to Boost Emerging Tech Start-Ips in Europe

European Innovation Council Programs

- EIC Accelerator: €634 million in 2024 for SMEs, start-ups, spin-offs with breakthrough innovations
- EIC Pathfinder: €262 million in 2025 for multidisciplinary research teams for breakthrough technologies
- EIC Transition: €98 million in 2025 for technology validation and business development
- EIC STEP Scale Up: €300 million in 2025 for quantum and semiconductors

Horizon Europe

- Cluster 4 — Digital, Industry and Space: €536 million for 28 topics across AI, quantum, robotics and advanced materials
- GENAI4EU Initiative: €700 million across multiple programs for GenAI applications in strategic sectors

Digital Europe Programme

- Main program: €8 billion between 2021 and 2027 focused on AI, cybersecurity, supercomputing and semiconductors
- Quantum Digital Skills Academy: up to €10 million per project on specialized quantum training and education

Infrastructure and Connectivity Programs

- Connecting Europe Facility Digital: €865 million between 2024 and 2027 on 5G networks, infrastructure, and quantum communications
- InvestEU Programme: €372 billion between public and private investment mobilized for SMEs, R&D, and digitalization

Specialized and Targeted Programs

- European Institute of Innovation & Technology (EIT) Programs:
  - EIT Digital Venture Incubation Program (DeepTech)
  - EIT Urban Mobility Accelerators (AI, IoT, Blockchain)
- EU Chips Fund: €2 billion for semiconductors start-ups and scale-ups
- EU Chips Design Platform: fabless semiconductor start-ups, SMEs, and research organizations

€3+ billion in total EU funding in 2025

Source: European Commission, European Innovation Council, list not exhaustive.

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Emerging Tech Sovereignty Through Indigenous Innovation in Europe

Europe is pursuing digital sovereignty through ambitious policies, major investments, and programs like InvestAI and the Quantum Strategy to reduce foreign dependencies and build a self-reliant tech ecosystem in areas such as AI, semiconductors, and cybersecurity.

Recent EU initiatives allocate billions to strengthen start-ups, scale-ups, and infrastructure while advancing cybersecurity and post-quantum cryptography for data resilience.

A key focus is consolidating fragmented support for start-ups to create robust digital infrastructure, though further action is needed to overcome strategic dependencies and ensure long-term autonomy.

- Funding as a tool for strategic autonomy
- Ecosystem building for control over digital infrastructure
- Regulatory alignment
- Talent and knowledge retention
- Key partnerships

Recent and very diverse examples of sovereignty enforcement across Europe

ECONOMY • FRENCH ECONOMY

French state buys Atos's advanced computing division

The French government agency is spending €410 million to acquire the branch that manufactures strategic supercomputers, which are notably used for nuclear deterrence.

By Olivier Pinaud
Published on June 2, 2025, at 11:42 am (Paris) · 2 min read · Lire en français

Subscribers only

The BullSequana XH3000, a supercomputer developed by Atos, in Paris, February 16, 2022. ÉRIC PIERMONT/AFP

The French government is continuing its strategic acquisitions. After nationalizing the submarine telecoms cable manufacturer ASN for €350 million in November 2024, the Finance and Economy Ministery announced on Monday, June 2, that it had submitted an offer to acquire the advanced computing division of the tech firm Atos. The company has accepted the offer. "This step paves the way for the signing of a binding agreement in the coming weeks," the ministry stated. The government is expected to take full control by mid-2026, allowing time to complete all of the necessary legal steps. Negotiations had been underway since November 2024.

A special event in Barcelona brought together the Sateliot family and key stakeholders to witness the launch live, featuring support from ESA, GSMA, the Spanish Government, and more. Presented by Josep Calatayud, director of the "Control de Misión" YouTube channel, the event featured insightful interviews with shareholders, authorities, and employees. Co-founders Jaume Sanpera (CEO) and Marco Guadalupi (CTO) provided in-depth explanations and forecasts for Sateliot's future. You can rewatch the entire event here.

"This launch propels us into a new phase of development," said Jaume Sanpera, CEO and co-founder of Sateliot. "Not only will we begin generating revenue, but we will also position Spain as a global leader in IoT connectivity."

Inspired by Antoni Gaudí's iconic dragon, the mission badge for 'Revolution' symbolizes the resilience of Sateliot's technology and the company's global ambitions. The four flames represent each newly launched satellite, with the multicolored fragments foreshadowing a constellation of over 100 satellites by 2028."

It also represents the revolution of the 5G NB-IoT NTN standard as Sateliot is presented with the opportunity to transform industries worldwide; regardless of location or infrastructure, connectivity black spots will become a thing of the past.

PRESS RELEASE

ICEYE and Portuguese Air Force announce first direct satellite procurement

Helsinki, Finland – December 2nd, 2025 – ICEYE, the global leader in Synthetic Aperture Radar (SAR) satellite operations, and the Portuguese Air Force (Força Aérea Portuguesa) are pleased to announce the signing and entry into force of a contract for the direct procurement of a SAR satellite. This marks the first time the Portuguese Air Force will directly acquire a satellite, representing a significant milestone in Portugal's national ISR defense capabilities from space.

Under the agreement, ICEYE will deliver a state-of-the-art SAR satellite to the Portuguese Air Force. ICEYE's SAR technology provides unique advantages, including all-weather, day-and-night imaging and rapid revisit rates, ensuring persistent and reliable monitoring regardless of environmental conditions.

This acquisition will provide the Air Force with enhanced capabilities for persistent surveillance,

Expert Analyst Interview

Q1. What have Emerging Technologies to do with the Semiconductor industry?

Lapo Fioretti

Senior Research Analyst

Q2. What could be the best bets for the EU in the next few years regarding EmTechs?

Lapo Fioretti

Senior Research Analyst

Q3. And specifically in the semiconductor industry, where is the EU lagging?

Lapo Fioretti

Senior Research Analyst

Q4. What does the EU have to provide to make that happen?

Lapo Fioretti

Senior Research Analyst

Q&A

Key Takeaways

Edge will grow in coming years and will require a strong industry to back it up

AI Dominates Near-Term Bets

GenAI leads current adoption, while Agentic AI, Wi-Fi 7, and AI accelerators are top priorities for the next two years.

Long-Term Tech Still Nascent

Quantum, neuromorphic, and photonic computing remain in "watch and learn" mode, with commercial rollout beyond 2030.

Ecosystem Maturity & Competition

Established providers dominate partnerships; start-ups must differentiate through specialization and ROI-driven solutions.

EU Funding Surge

Over €3 billion in 2025 supports strategic autonomy via programs like InvestEU, EU Chips Fund, and GENAI4EU, targeting infrastructure, talent, and innovation scaling


IDC