



## Forrester's Top 10 Emerging Technologies For 2024: GenAI, TuringBots, And IoT Security Poised To Deliver The Fastest ROI

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*The rapid acceleration of AI innovation has sparked a surge in advancement in other emerging technologies*

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Jun. 25, 2024-- According to [Forrester's](#) (Nasdaq: FORR) [The Top 10 Emerging Technologies In 2024](#) report, [generative AI](#) (genAI) for visual content, genAI for language, TuringBots, and IoT security are the top emerging technologies that will deliver the most immediate ROI for businesses in 2024 and beyond.

With new technologies emerging seemingly every day, business and technology leaders need to time those investments based on value, risk, and potential payout timelines. Forrester organizes its top emerging technologies by benefit horizon to help with these decisions.

### Emerging technologies that will offer significant benefits within the next two years:

- **GenAI for visual content.** Advanced machine learning models that generate images or video from text, audio, or video prompts, this technology will help firms generate visual content for marketing, experiences, and products.
- **GenAI for language.** GenAI for language is already delivering value in customer support and content creation but continues to advance at a blinding pace. It is accelerating many other technologies as it goes.
- **TuringBots.** Accelerated by advancements in genAI for language, these [AI-powered software robots](#) help developers build applications that deliver more than just code generation.
- **IoT security.** The proliferation of devices has led to an exponential explosion in security attacks, raising the importance of security for IoT devices. Vendors are competing and colliding in a rush to offer capabilities.

### Midterm emerging technologies that will deliver benefits in the next two to five years:

- **AI agents.** The role of autonomous workplace assistants or AI agents has expanded beyond the back office and employee assistance to customer-facing automation. These AI agents will grow increasingly sophisticated to better understand and respond to nuance and context.
- **Autonomous mobility.** This technology will accelerate commercial and urban transportation ecosystem collaborations to orchestrate personalized mobility experiences for both customers and businesses.
- **Edge intelligence.** Advanced edge intelligence capabilities such as edge machine learning are still not yet common, even though many foundational elements like Apple foundation models are becoming available.
- **Quantum security.** This technology will overhaul security systems for on-premises and cloud compute, storage and network infrastructure, commercial off-the-shelf software, commercial software-as-a-service offerings, and in-house built software.

### Emerging technologies that will take at least five more years to deliver tangible value for most firms and use cases:

- **Extended reality (XR).** Only 8% of US online adults own a virtual-reality headset, and just 16% have used an augmented-reality device or app. While XR is advancing in training and onboarding, companies are resisting investing in tools like these until they see broad adoption.
- **Zero Trust edge (ZTE).** ZTE technology has the potential to protect remote workers, retail outlets, and branch offices with embedded local security, but only a handful of true ZTE solutions exist today, and legacy devices add additional management complexity.

"Tech leaders must be able to identify the right use cases and quantify potential benefits, costs, and risks across multiple horizons," says Brian Hopkins, Forrester VP, emerging tech portfolio. "They need to spread investments out, with shorter-term technologies delivering quick returns and longer-term bets requiring more effort, more foundational investment, and the capacity to manage more risk."

### Resources:

- [Learn](#) more about the top emerging technologies that will deliver ROI for enterprises.
- Read [The Top 10 Emerging Technologies In 2024](#) report to gain insight into maturity trends, business value, important use cases, and risks associated with each technology (client access required).
- [Register](#) for a complimentary webinar that takes a deep dive into the 2024 list of emerging technologies and their use cases and benefits.
- [Download](#) Forrester's complimentary guide for tech leaders to identify use cases and gain support for emerging technologies.
- Tech and data leaders can attend Forrester's 2024 Technology & Innovation Summits in [North America](#), [EMEA](#), and [Asia Pacific](#) to learn how to align their IT strategy to their business goals to accelerate growth.

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