# Hype Cycle for Emerging Technologies, 2023

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# The Hype Cycle for Emerging Tech Spans IT

Distills **must-know** emerging technologies from more than **2,000 innovation profiles** that show promise of **transformational** competitive advantage **over the next two to 10 years.**

**Reach Beyond. Discover, Innovate, Accelerate.**


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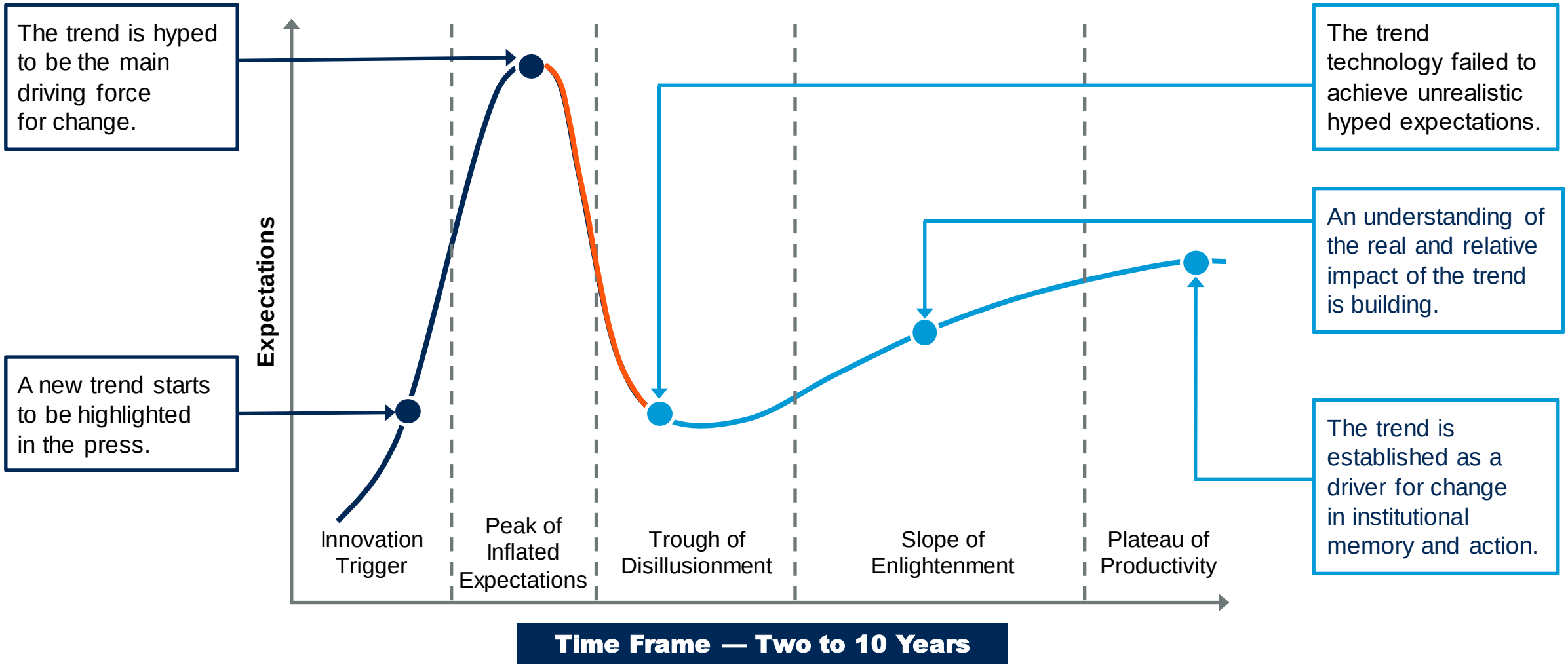
# Explaining the Hype Cycle Stages





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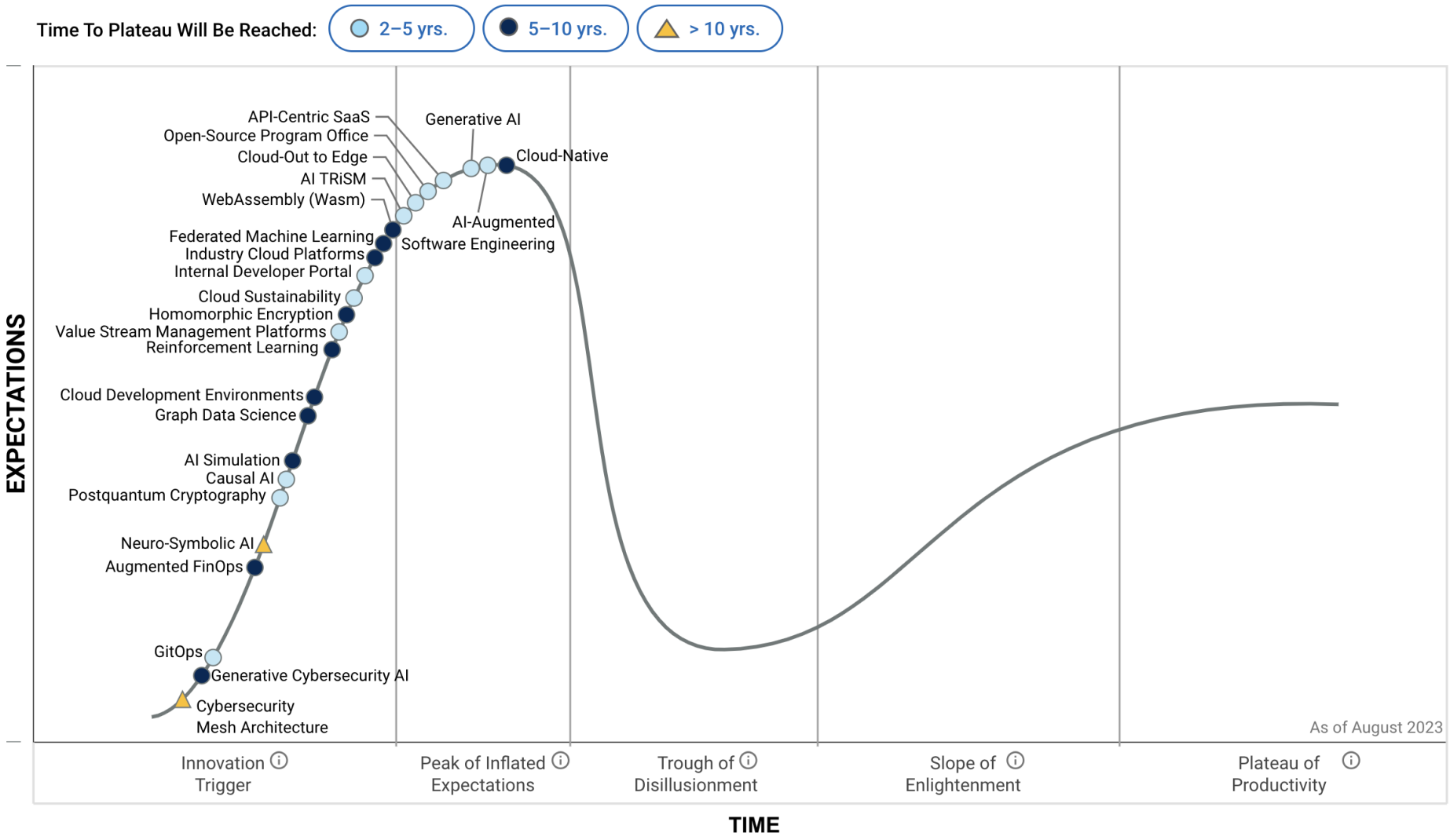


Source: Hype Cycle for Emerging Technologies, 2023 (G00793566)


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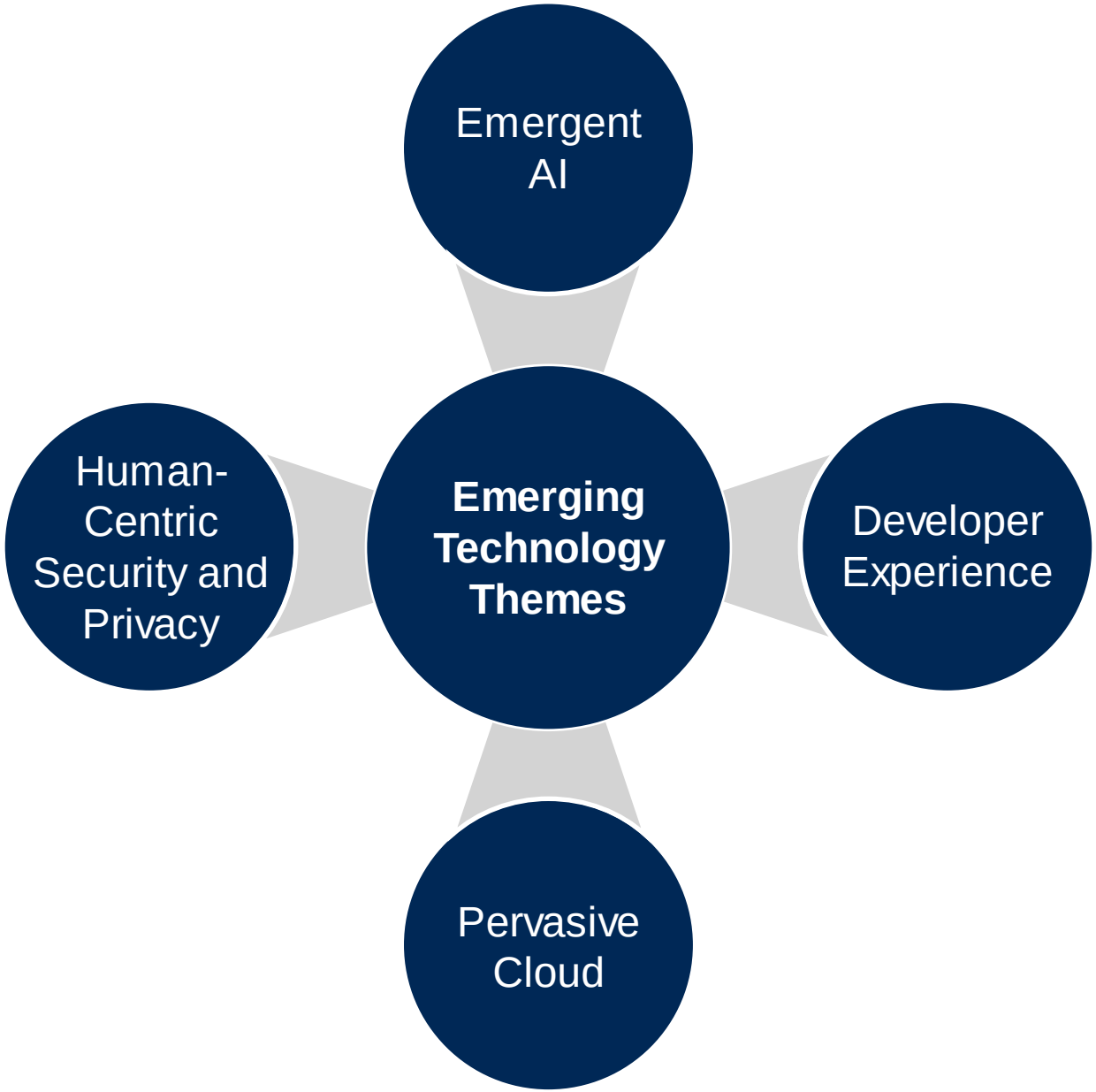
# Four Emerging Technology Themes





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# 1.

# Emergent AI


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# Emergent AI

- Generative AI
- Casual AI
- Federated Machine Learning
- Neuro-Symbolic AI
- Reinforcement Learning
- Graph Data Science
- AI Simulation

**GenAI will be the foundation for AI innovation, but other emerging AI techniques also offer immense potential.**


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# 2.

# Developer Experience (DevX)


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# Developer Experience (DevX)

- Internal Developer Portal
- Value Stream Management Platforms
- Open-Source Program Office
- API-Centric SaaS
- GitOps
- AI-Augmented Software Engineering

**DevX is vital for attracting and retaining top talent, for ensuring team morale remains high, and that work is motivating and rewarding.**


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# 3.

# Pervasive Cloud


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# Pervasive Cloud

- Cloud-Out to Edge
- Cloud-Native
- Industry Cloud Platforms
- Cloud Development Environments
- Cloud Sustainability
- Augmented FinOps
- WebAssembly (Wasm)

**New cloud innovations will make it more distributed, verticalized, portable and efficient, enabling pervasive cloud.**


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# 4.

# Human-Centric Security and Privacy


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# Human-Centric Security and Privacy

- Cybersecurity Mesh Architecture
- Postquantum Cryptography
- Homomorphic Encryption
- AI TRiSM
- Generative Cybersecurity AI

**These technologies can facilitate a more human-centric approach to security and privacy, enabling mutual trust and shared responsibility between teams.**


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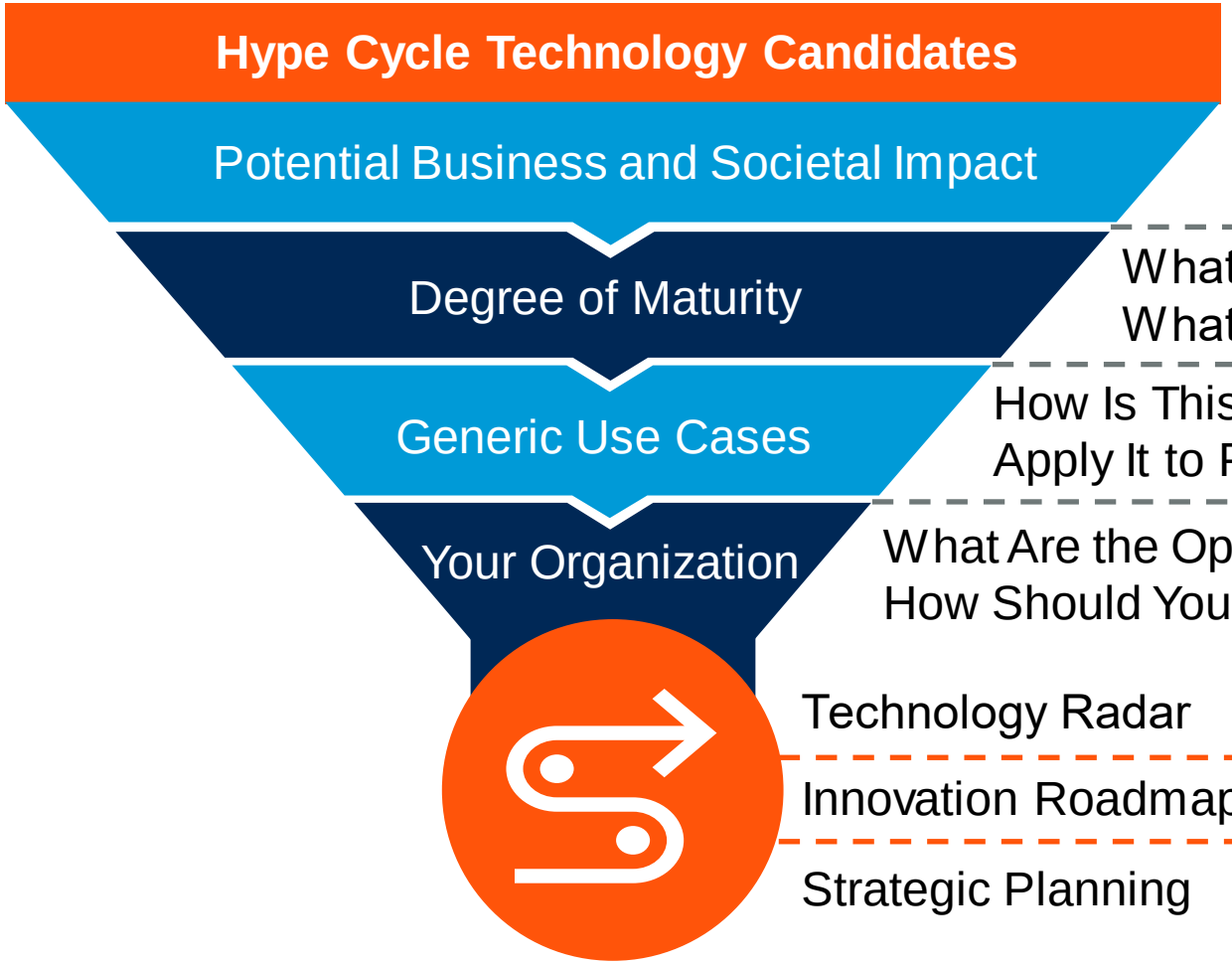
# Next Steps: Assessing the Impact of Emerging Technologies




Why Do I Care?
Why Can't I Ignore It?

What Is the Maturity of the Technology?
What Obstacles Must Be Overcome?

How Is This Technology Being Used?
Apply It to Product, Process, B-Model?

What Are the Opportunities for Your Organization?
How Should You Respond?

Technology Radar

Innovation Roadmap

Strategic Planning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# Recommended Gartner Research

- **Hype Cycle for Emerging Technologies, 2023**
  Arun Chandrasekaran and Melissa Davis (G00793566)
- **Tool: Create Your Own Hype Cycle With Gartner's Hype Cycle Builder**
  Frances Karamouzis and Jan-Martin Lowendahl (G00776047)
- **Understanding Gartner's Hype Cycles**
  Philip Dawson, Jan-Martin Lowendahl and Felix Gaehtgens (G00793868)

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