

Wired for Intelligence: Accelerating AI in FSI with network modernization

InfoBrief, sponsored by NTT DATA and Cisco



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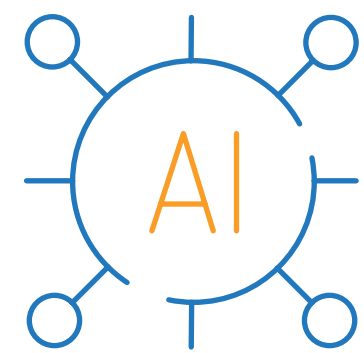
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Executive Summary: AI-powered networking is redefining the digital enterprise and driving better outcomes.

In a rapidly evolving digital landscape, AI is revolutionizing networking across industries, offering unprecedented opportunities for growth and efficiency. This IDC InfoBrief delves into the transformative impact of AI on networking, highlighting its critical role in banking and financial services. By leveraging AI-driven monitoring, automated configuration, anomaly detection, and self-healing capabilities, organizations can enhance network resiliency and responsiveness, driving tangible business benefits.



AI Networking Insights

AI is reshaping network management by enabling advanced automation, enhancing security, and optimizing performance, thus becoming a strategic asset for businesses.



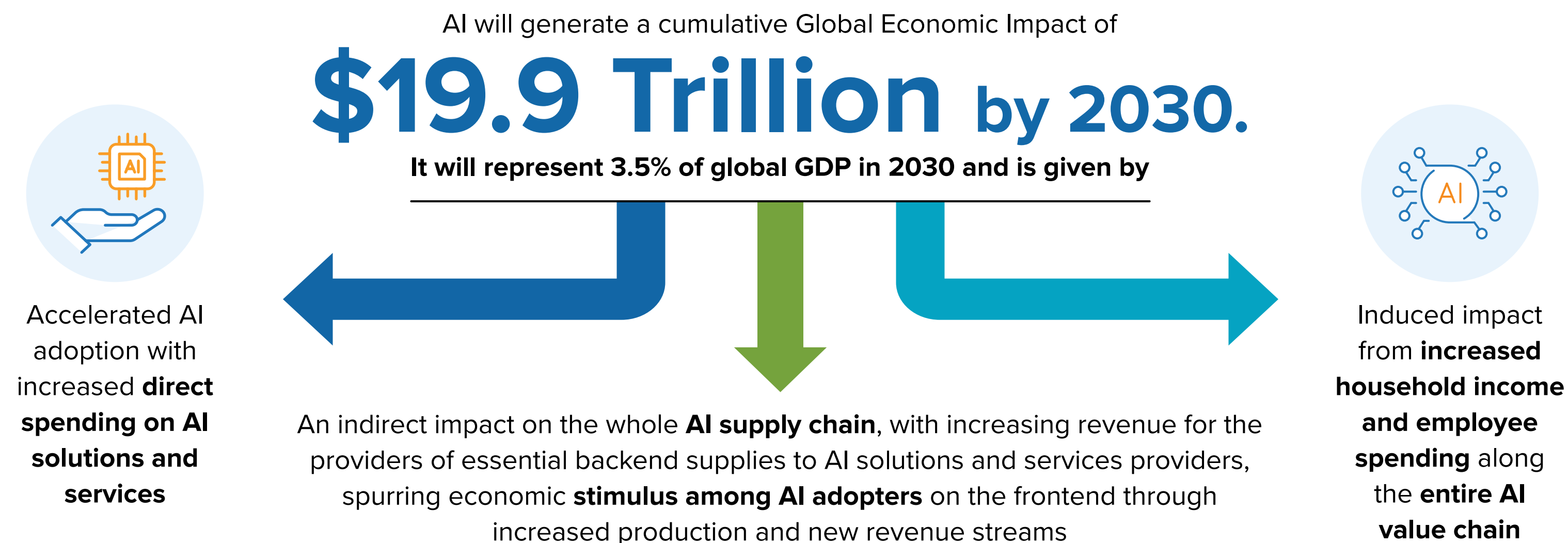
Banking and Financial Services

Financial institutions prioritize AI for network security and automation, aiming to enhance transaction safety and reduce operational costs.

Over 78% of companies state that networking capabilities are either important or very important in selecting a provider for generative AI (GenAI) infrastructure. By harnessing the power of AI in networking, organizations can enhance their operational capabilities, foster innovation, improve their competitive position, and accelerate business growth.

AI will have a significant economic impact and is transforming the future of every industry.

- Businesses across various sectors are recognizing the **transformative potential of AI** and are allocating significant portions of their budgets to integrate these technologies into their operations.
- The **entire AI supply chain**, from providers of essential backend supplies to AI solutions and services providers, is experiencing **increased revenue**.
- This growth extends to AI adopters on the frontend, who benefit from **enhanced production capabilities** and **new revenue streams**.
- The **ripple effect of AI adoption** is creating a robust economic ecosystem that supports sustained growth.

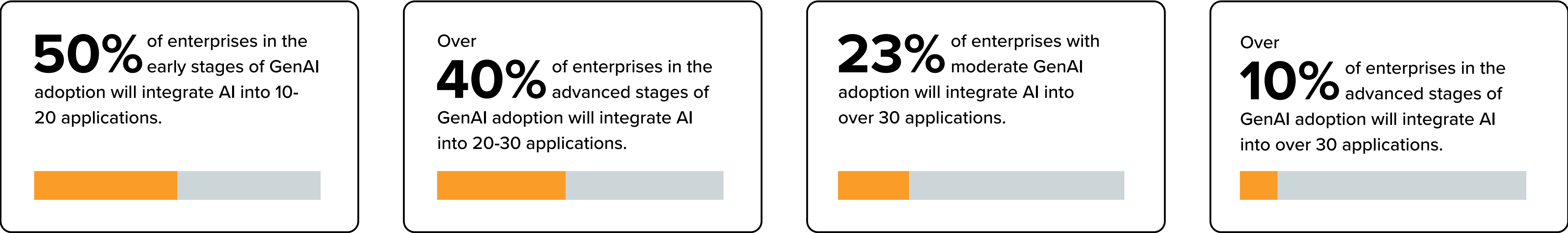


In 2030, every new dollar spent on business-related AI solutions and services will generate \$4.6 into the economy, in terms of indirect and induced effects.

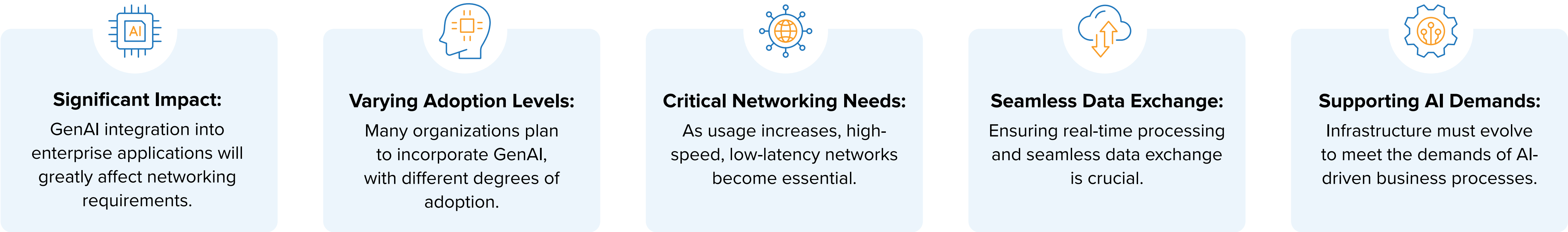
- Notes:**
- Global Economic Impact is calculated as a cumulative sum of the direct, indirect, and induced economic impact from 2024 to 2030.
 - Percentage of GDP is calculated using the total economic impact of AI in 2030 and the projected worldwide GDP by IMF in 2030.

The accelerated adoption of AI technologies is driving massive investment, which aims to unlock new efficiencies, innovation, and competitive advantage across industries.

Enterprises want to adopt AI, but they are still working from old playbooks.

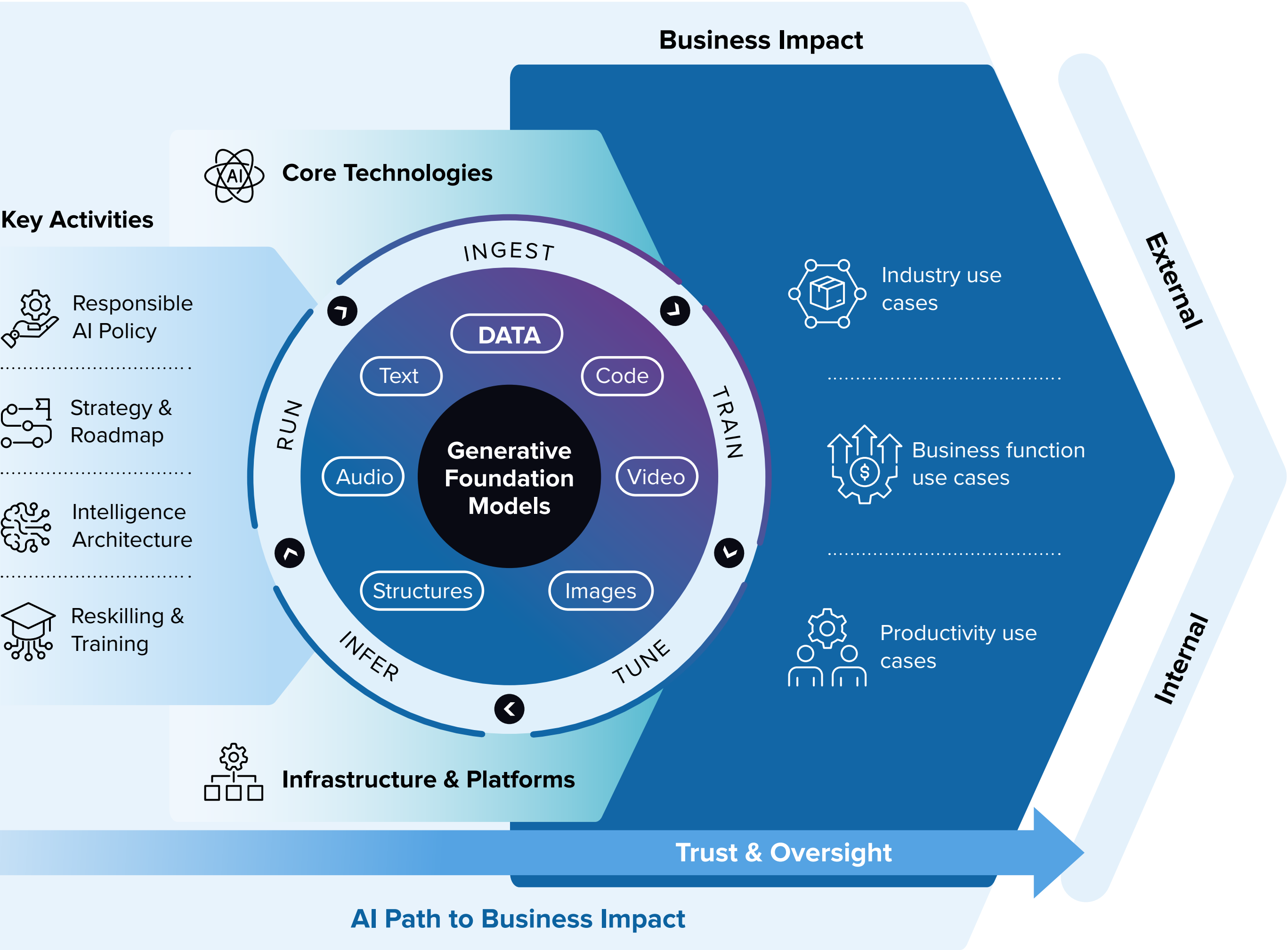


Total sample: N=1,209 – **Weighted base:** N=1,209. **Q:** Over the next year, within how many enterprise business or IT applications does your organization plan on integrating Generative AI (GenAI) model results?-



Networks must evolve to become smarter and more adaptive, leveraging AI-enabled services to meet the heightened expectations of today’s digital business and surpass the capabilities of yesterday’s service providers.

Technology support should go beyond SLAs and break-fix/uptime to include business outcomes.



Service level agreement

Performance, Reliability, Uptime

Ensures business continuity, minimizes disruptions and maximizes user productivity

KPI: Availability, response times for critical services



Utilization level agreement

Resource optimization and cost efficiency

Reduces IT spending, optimizes resource allocation and minimizes security vulnerabilities

KPI: Cost reduction and improved license usage level



Value level agreement

Business outcomes and strategic alignment

Drives business growth, enhances customer experience, mitigates risks and delivers measurable ROI

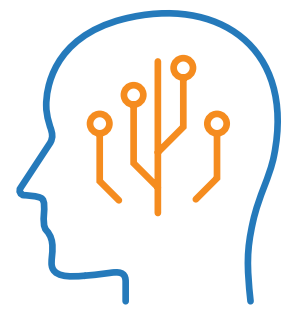
KPI: Increased revenue and customer satisfaction



Shift the focus from uptime to outcomes:

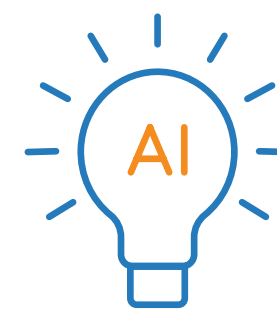
Align technology support with what the business truly values.

Companies can maximize business impact through strategic AI vendor and technology selection.



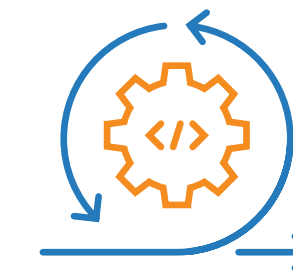
Focus on Outcomes, Not Products

When selecting vendors and technologies, prioritize **solutions that deliver tangible business outcomes** rather than just focusing on product features. Ensure that your **technology investments align with strategic goals**, driving measurable results that enhance overall business performance.



Look for Value Creation from AI Technology and Services

Choose vendors who offer **AI solutions and services designed to create value** by enhancing efficiency, fostering innovation, and providing a competitive edge. By maximizing the value derived from AI investments, businesses can achieve sustainable growth and long-term success.

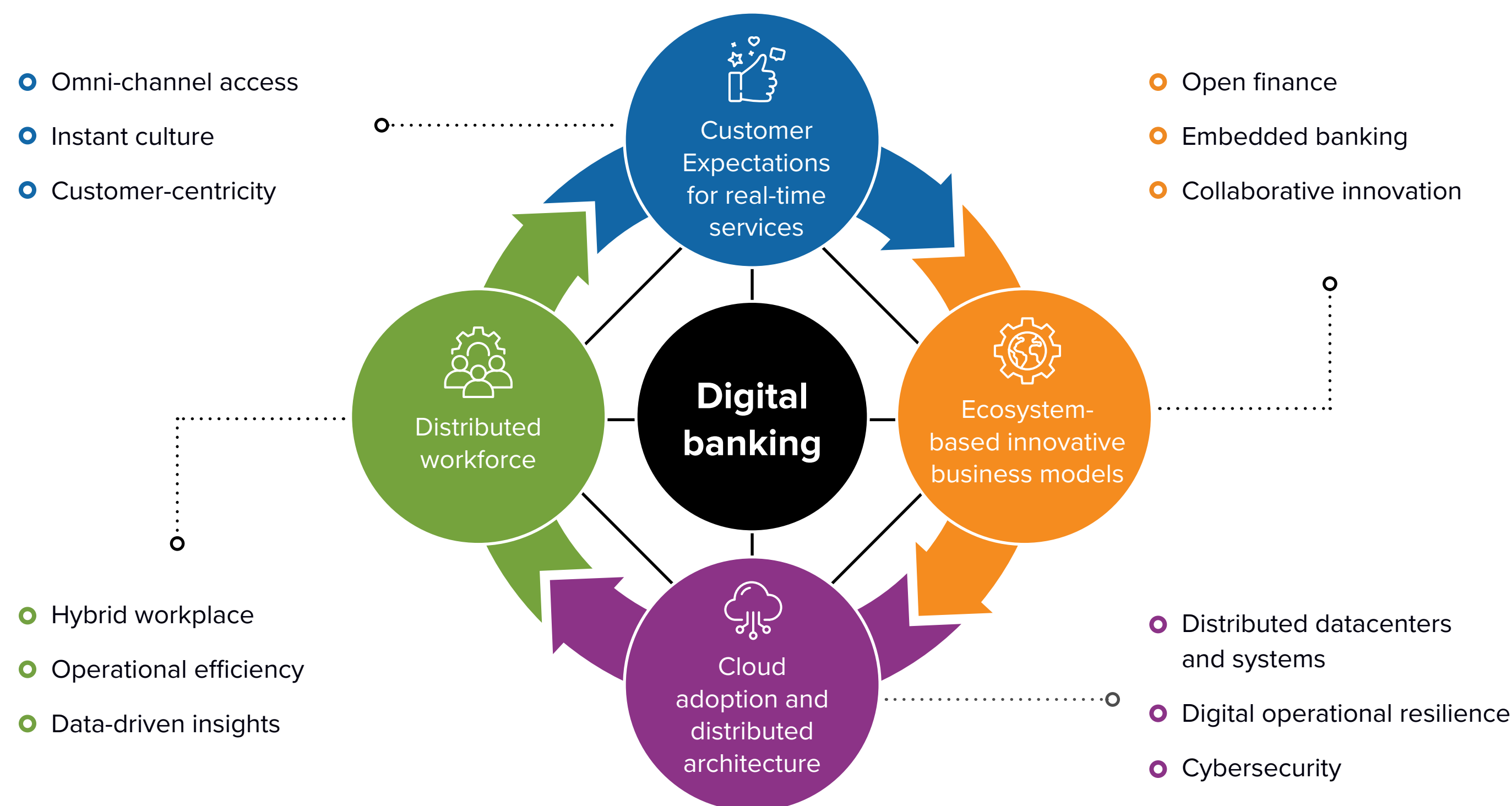


Use AI to Improve Lifecycle Services

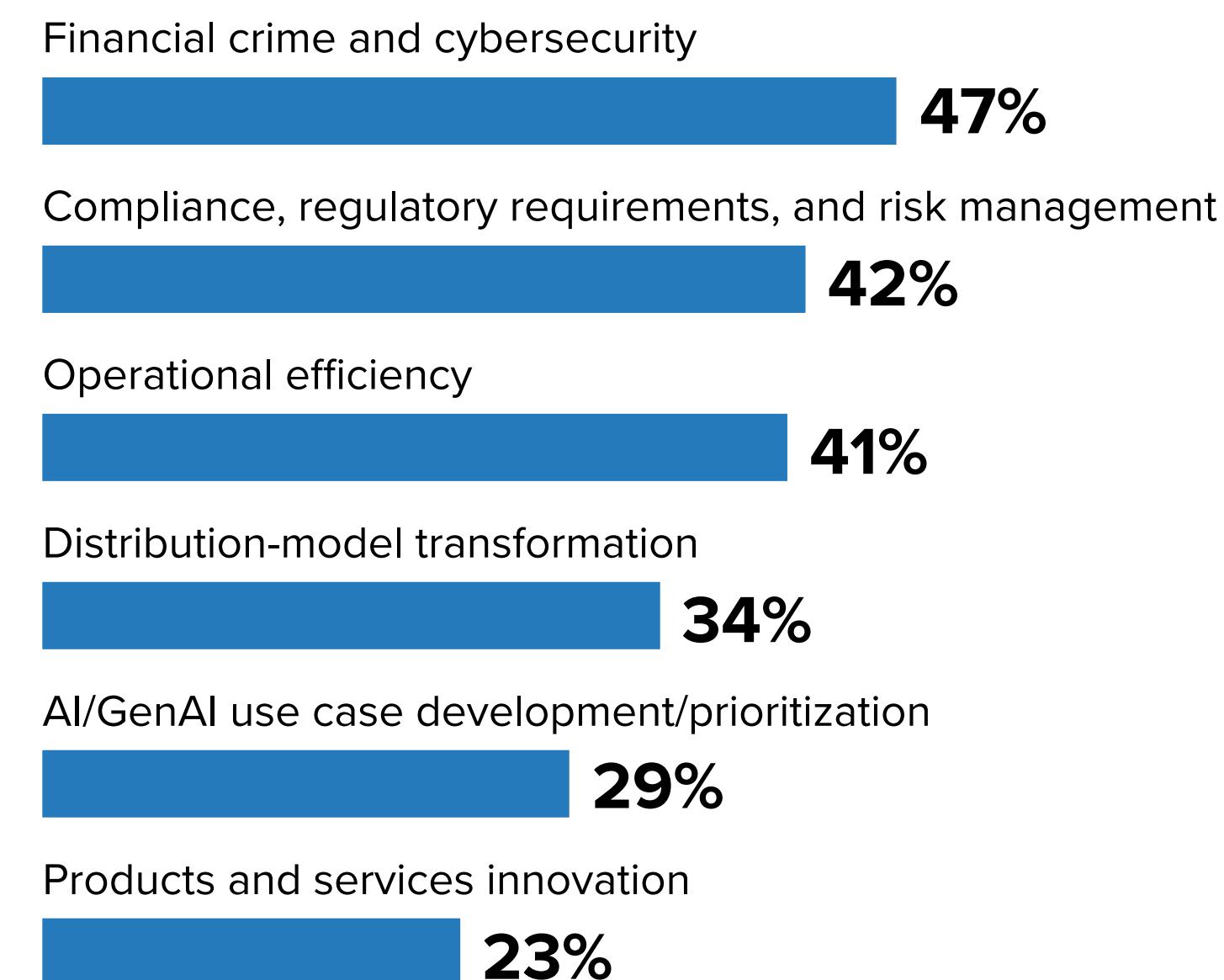
Leverage **AI to optimize lifecycle services**, from initial deployment to ongoing maintenance, ensuring that each phase benefits from AI-driven insights and automation. This approach guarantees **continuous improvement and operational excellence** throughout the technology lifecycle, reducing costs and enhancing service quality.

The financial services industry (FSI) operates in a complex ecosystem-driven space and must address the customer quest for real-time services.

The FSI has undergone a major digital transformation, allowing banks to leverage the ecosystem, accelerate innovation, foster collaboration, and meet customer expectations for real-time services. Finance institutions operate under time pressure in a highly distributed, augmented, and interconnected environment. The FSI must rely upon secure and reliable connectivity. High-speed, low-latency networks are needed to ensure seamless data exchange and real-time processing, enabling business transformation.



What are your organization's top business priorities for 2025?



The FSI's move toward real-time customer-centric services calls for secure and accurate customer data management leveraging AI.

Customers, whether consumers or corporates, are looking for real-time customer-centric services available at any time and everywhere. Finance entities must be able to process, report, and provide visibility to their customers in real-time. Real-time payments and online trading rely on low network latency, high reliability, and fast processing. Banks must provide data-driven personalized services with omni-channel access, while protecting customers' privacy and sensitive data transfer, and must adopt AI and GenAI to better address stakeholders' needs.

What AI/GenAI use case initiatives is your organization prioritizing?

Customer engagement and enablement (e.g., hyper personalization, onboarding, or origination)

51%

Risk management and financial crime (e.g., adverse media screening, social network analysis, or report generation)

43%

Compliance and reporting (e.g., client/regulatory reporting)

38%

Operations automation (e.g., contract management, exception handling, straight through processing, or error resolution)

36%

Employee engagement and enablement (e.g., knowledge worker augmentation or knowledge management)

30%

Channel automation (e.g., virtual agent, chatbots, or customer self-service)

26%

Financial services institutions are investing heavily in hyper-personalized services and 24 x 7 real-time service availability.



AI/GenAI initiatives are geared to enhance customer experience by leveraging valuable data-driven insight, while ensuring customers' data security.

The FSI is expected to record investment of \$2.5 billion worldwide in 2027 in information and data security software.

Hyper-personalization can be achieved by combining GenAI and agentic AI.

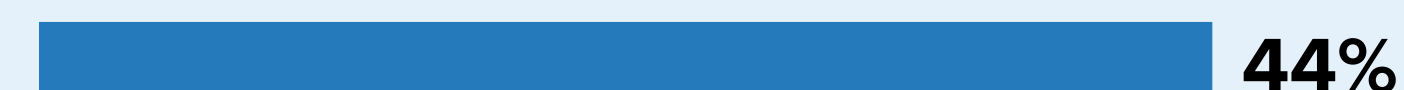
Adopting GenAI and agentic AI necessitates reviewing and upgrading infrastructure and ensuring customer data is properly protected while at rest and in motion.

How will your organization's plan to use agentic AI in business processes affect your infrastructure investment priorities in the next year?

We will increase our efforts to automate the deployment and autoscaling of resources.



We will need to increase our network infrastructure capacity.



We will drive the greater standardization of our data integration and retrieval capabilities.



We will need to expand our use of zero-trust access controls.



We will accelerate our use of container platforms for existing and new apps.



We will need to significantly increase our storage capacity.



In 2027, FSI expenditure on **AI/GenAI network-related security products and services** is expected to reach nearly **\$51 billion**, representing a 2024–2027 CAGR of 32%.

First investment priority:
augmented fraud analysis

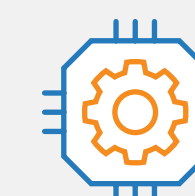


Second investment priority:
threat intelligence



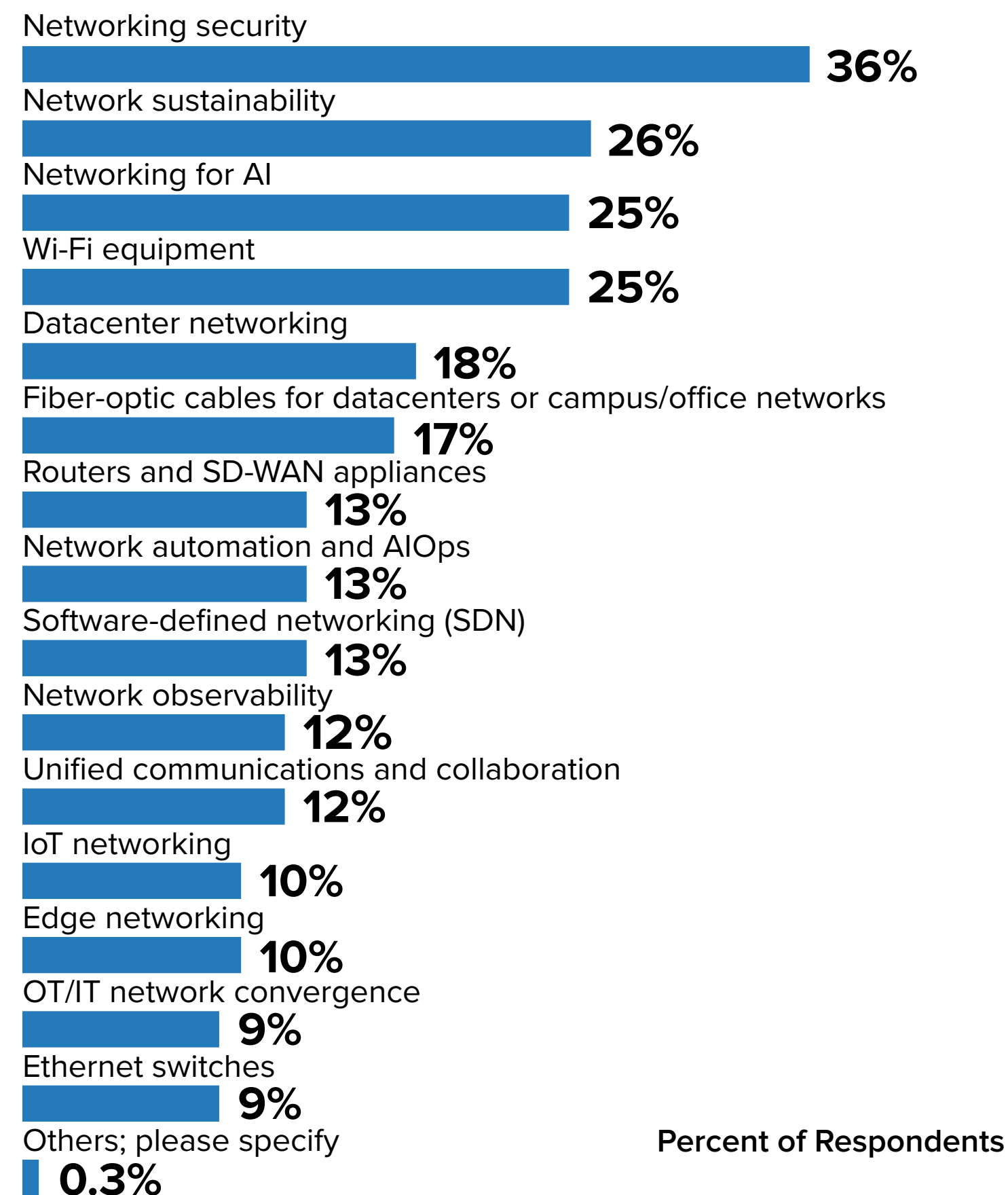
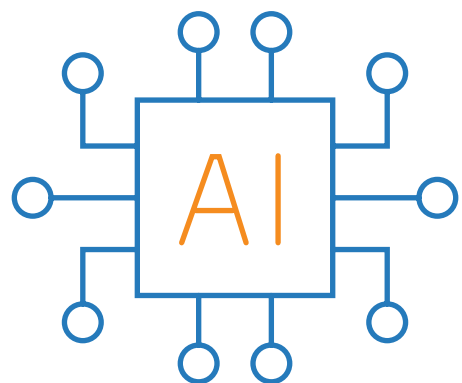
Other investment areas:

- Augmented IT operations
- AI-assisted security operations



Network security is key in banking; it enables finance institutions, with their ecosystem-driven business models and distributed infrastructures, to fully exploit the benefits of AI.

ICT infrastructure goes beyond the institution's bricks-and-mortar space, and banks must be able to connect all their systems seamlessly to exchange data securely and in real time. Banks willing to leverage the potential of AI, especially GenAI, must ensure stakeholders can exchange data smoothly and securely.



Network security is a prerequisite for banks' distributed architecture and their extended attack surfaces. It is the top network investment priority.



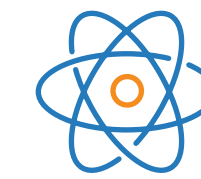
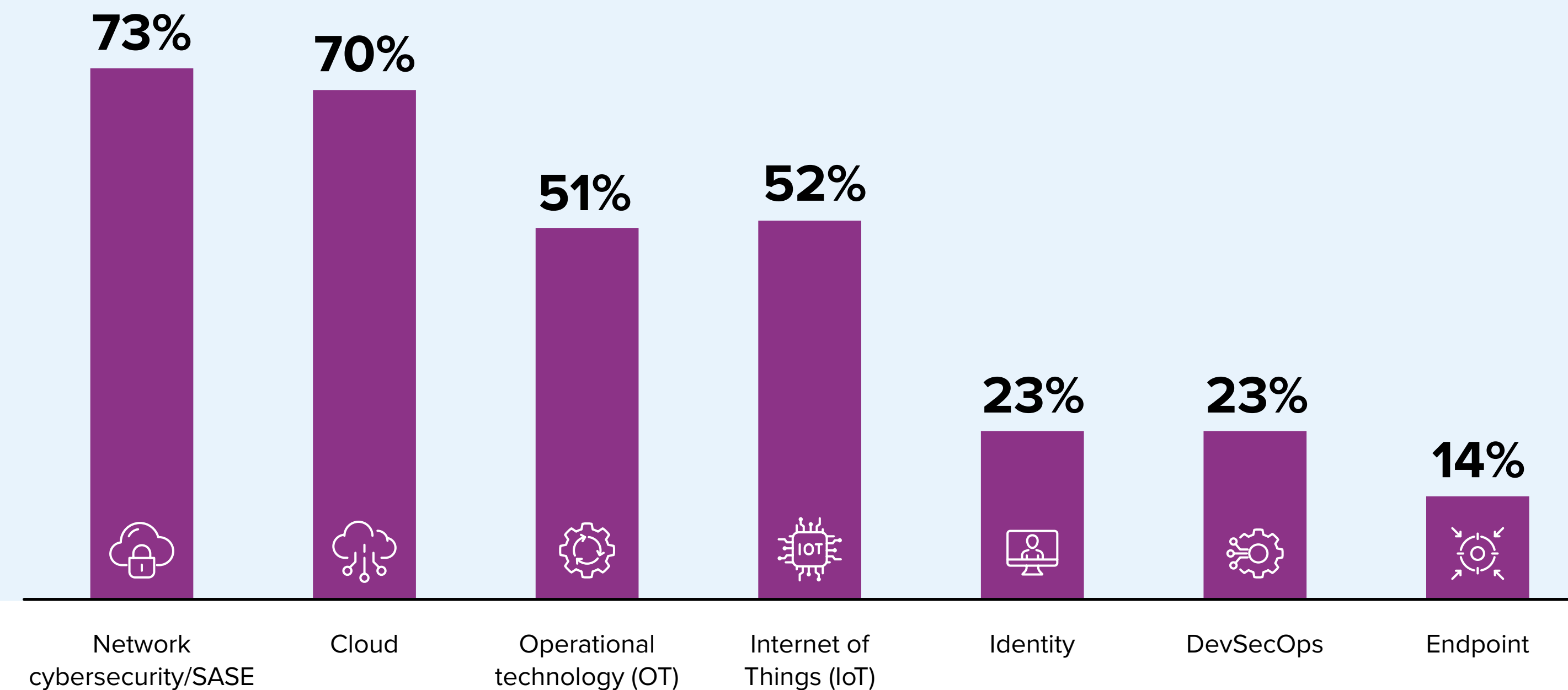
Setting up a network to support data exchange, the adoption of AI, and data-driven personalized services is the second most common network investment priority.



The AI-driven monitoring of network services can simplify control over complex distributed ICT infrastructure.

FSI must prioritize activities necessary to digitize operations, ensuring that the augmented attack surface in complex, ecosystem-driven business model are leveraging secure networks, using the network as a mean to protect digital information.

Which consulting services areas relating to cybersecurity architecture assessment and design will your organization prioritize?



Holistic view:

Financial services institutions are deploying AI to network services to gain a holistic view of their complex architecture and how it functions.



Simplified complexity:

Anomaly detection, integrated dashboards, and alerts of suspicious activities simplify complex architecture monitoring.



Ecosystem business models:

Attention to cybersecurity and secure access service edge (SASE) is growing due to open banking, embedded finance, the integration of business partners' services, the adoption of hybrid cloud and multicloud, and distributed workplaces.

How to Get Started: Essential Guidance for Financial Services Organizations Seeking Network Platforms.

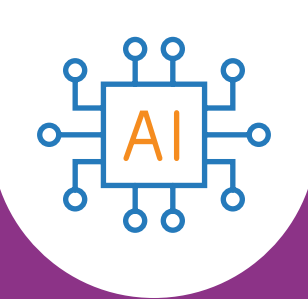
Key use cases in the FSI:



Networking for AI

Banks are looking to AI/GenAI adoption to deliver data-driven personalized value propositions.

Network capabilities are vital for interconnected banking transformation. AI/GenAI can power digital interactions in workplaces and with external partners, providing customers with omni-channel access to hyper-personalized value propositions.



AI for Networking

AI/GenAI adoption helps simplify the governance of complex and fragmented ICT architecture.

By combining network security with AIOps, banks can monitor anomalies in network traffic, helping to detect suspicious patterns and cyberattacks, while monitoring the smooth functioning of all components of the overall distributed architecture.

Five key steps in planning for augmented network services:

- 1 Take a strategic approach and identify the business processes to be enhanced with AI networking to deliver personalized customer experiences.
- 2 Apply unified security management across networking to safeguard data, connections, and devices, and leverage a dedicated network operations center.
- 3 Align cybersecurity and physical security with digital and operational resilience requirements.
- 4 Prioritize networking experience (e.g., low latency levels for digital processes) for all external and internal stakeholders, including operations and governance teams.
- 5 Seek technology suppliers with deep FSI expertise and regulatory understanding, and form strategic partnerships with them.

Networking leaders should create a clear road map for future AI networking adoption. The keys are assessment, planning, and investment.

Start the AI networking journey with pilot programs:

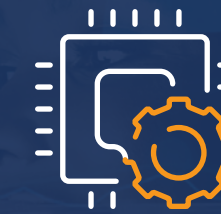


- Gain visibility and control over the current network infrastructure.
- Implement AI-enabled platforms with natural language interfaces for operations.
- Architect networks to integrate AI throughout the enterprise.
- Develop a skills transformation plan and identify early-win AI use cases.

Year 1

Use AI-enabled networking for observability and control.

Drive the adoption of advanced and AI-enabled networking:

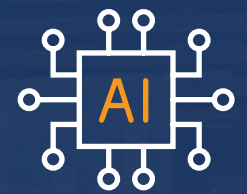


- Incorporate intent-based network concepts for enhanced assurance.
- Build datacenter networks to support AI workloads outside of cloud environments.
- Explore early use cases for AI-driven networks with automated root-cause analysis and remediation.
- Extend AI assistant usage as capabilities improve and confidence increases.

Year 2

Build out the datacenter network to support AI workloads.

Embed AI features into all networking areas:



- Integrate network automation with wider IT application deployment.
- Implement network and security platform convergence techniques for unified security controls.
- Expand the use of network-generated data for improved operational and business insights.

Year 3

Identify opportunities and implement AI across all operations.

Building the Digital Infrastructure foundation for AI-Driven Growth



NTT DATA and Cisco together deliver secure, scalable, and high-performance digital infrastructure solutions purpose-built for AI. We help organizations build the digital backbone for AI—from secure networking and cyber-resilient systems to hybrid data centers and AI-ready experiences for employees and customers. With Cisco’s industry-leading technology portfolio and NTT DATA’s global reach and end-to-end service portfolio, we deliver best-in-class infrastructure and service innovation. AI is embedded across every layer of our service delivery model—from AI Assistants and Agents to AI-powered services. Our AI-first, technology-centric approach gives organizations the visibility, control, and intelligence they need to plan, deploy, and operate with confidence. Together, we empower technology leaders to reinvent digital infrastructure for AI and unlock agility, efficiency, and measurable outcomes.

Visit our [Secure Networking page](#) to learn more .

Book an [Infrastructure & Software Lifecycle Assessment](#) to get started.

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