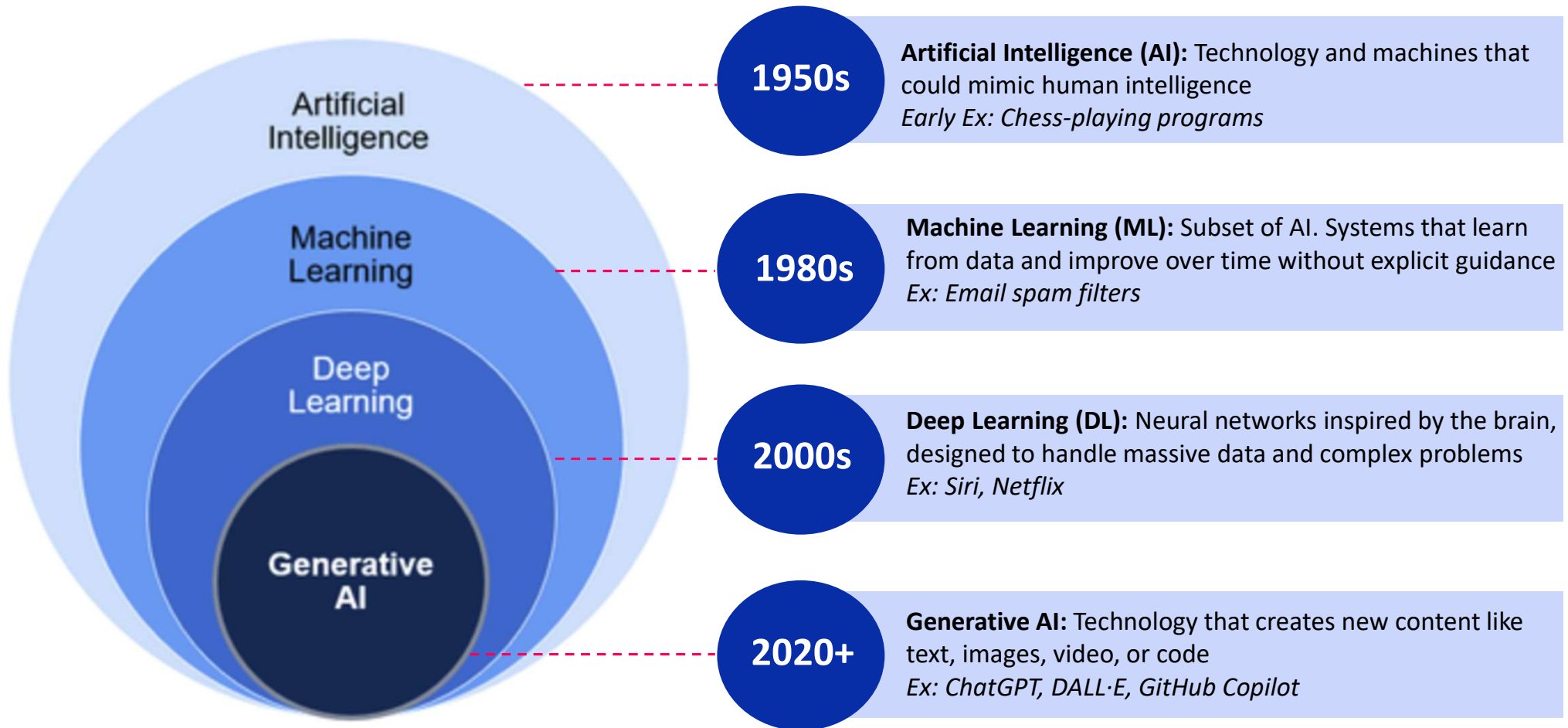


AI and Rural Telecom: A Strategic Imperative

Nova Patel,
Executive Business Consultant, JSI Tel

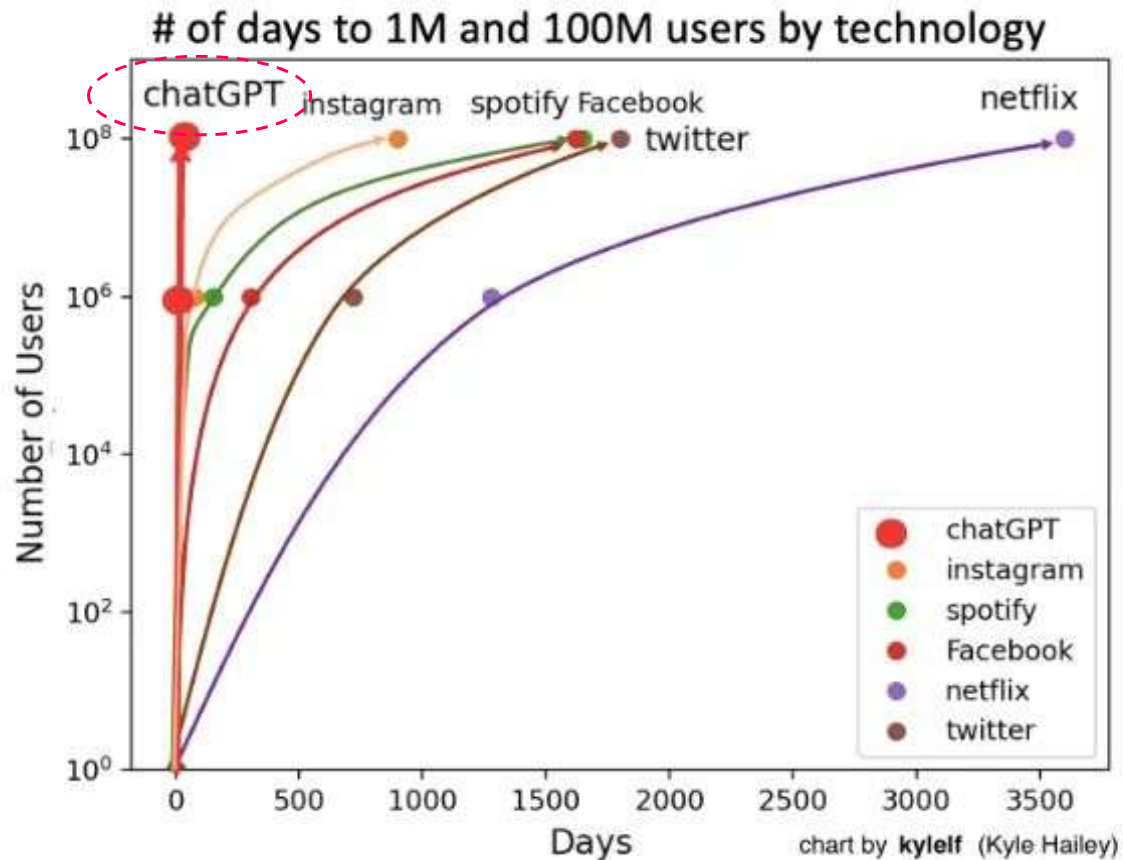


Evolution of Generative AI



AI is not one thing; it's a whole ecosystem transforming how we live and work.

The Fastest Technology Adoption In History

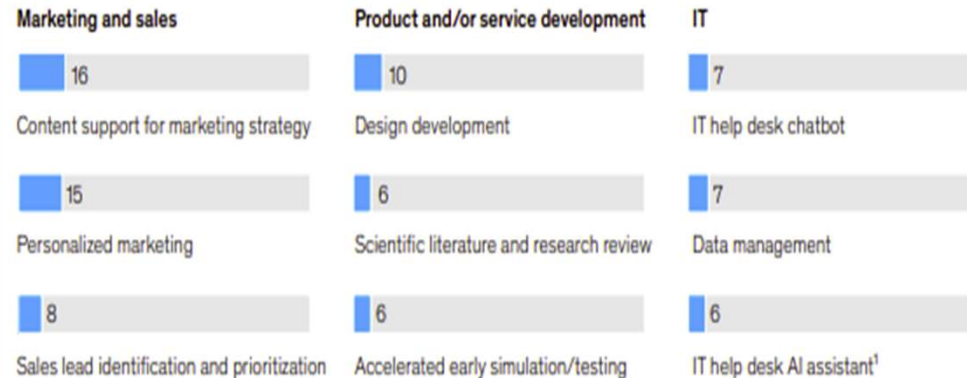


- ChatGPT reached 1M users in ~5 days and 100M in ~60 days
- Adoption speed eclipses Instagram, Spotify, Facebook, Twitter, and Netflix
- Reflects massive consumer readiness for AI-powered tools

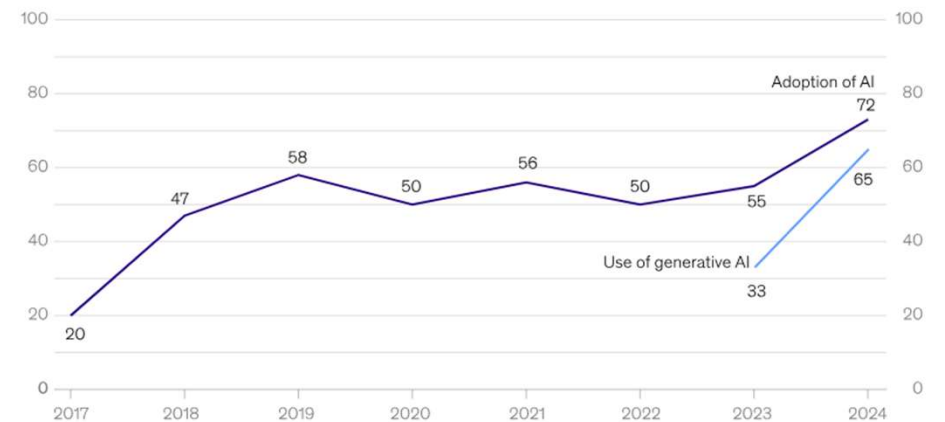
AI Adoption Statistics: *All Business/Industries*

- **78%** of organizations use AI in at least one function (up from 55% in 2023)
- **65%** of companies now regularly use **generative AI** (almost double from just 10 months prior)
- **92%** plan to increase their AI investments over the next 3 years

Most commonly reported gen AI use cases within function, % of respondents



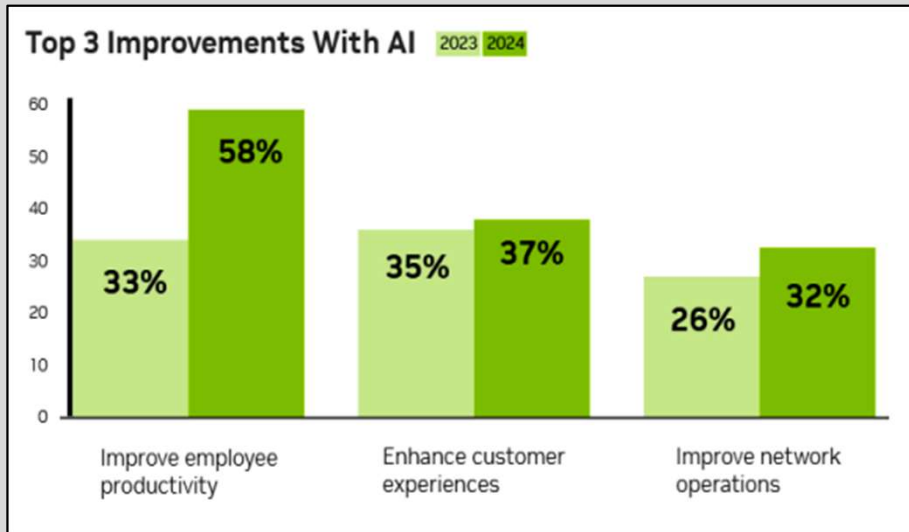
Organizations that have adopted AI in at least 1 business function,¹ % of respondents



Source: McKinsey & Company, "The State of AI in Early 2024"

Gen AI adoption is accelerating. It is not optional anymore. It is your next competitive edge.

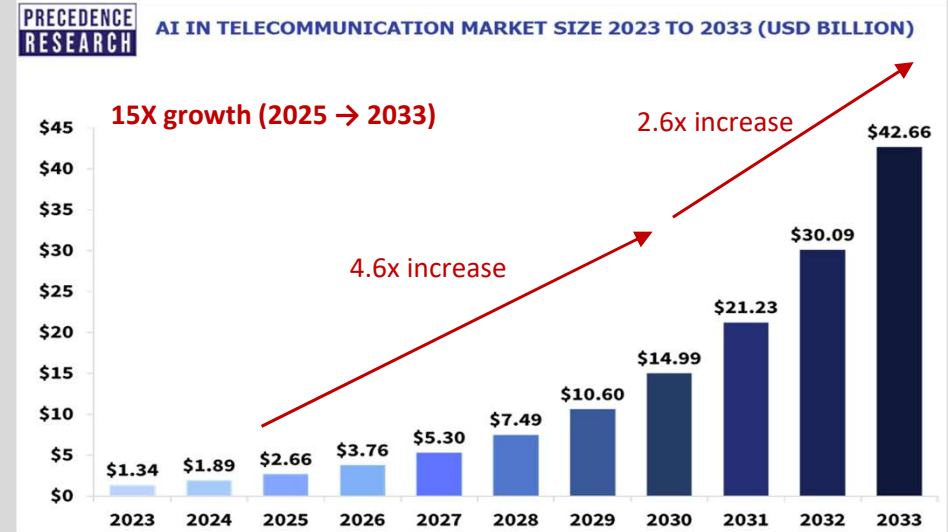
AI Adoption Statistics: *Telecommunications*



Source: Nvidia, "The State of AI in Telecommunications: 2025 Trends"

NVIDIA surveyed 450 telecom professionals worldwide:

- **97%** are using or evaluating AI; almost half have deployed it
- **65%** expect to boost AI investments in 2025
- **49%** are testing or applying generative AI
- **58%** cite *higher employee productivity as the main benefit*

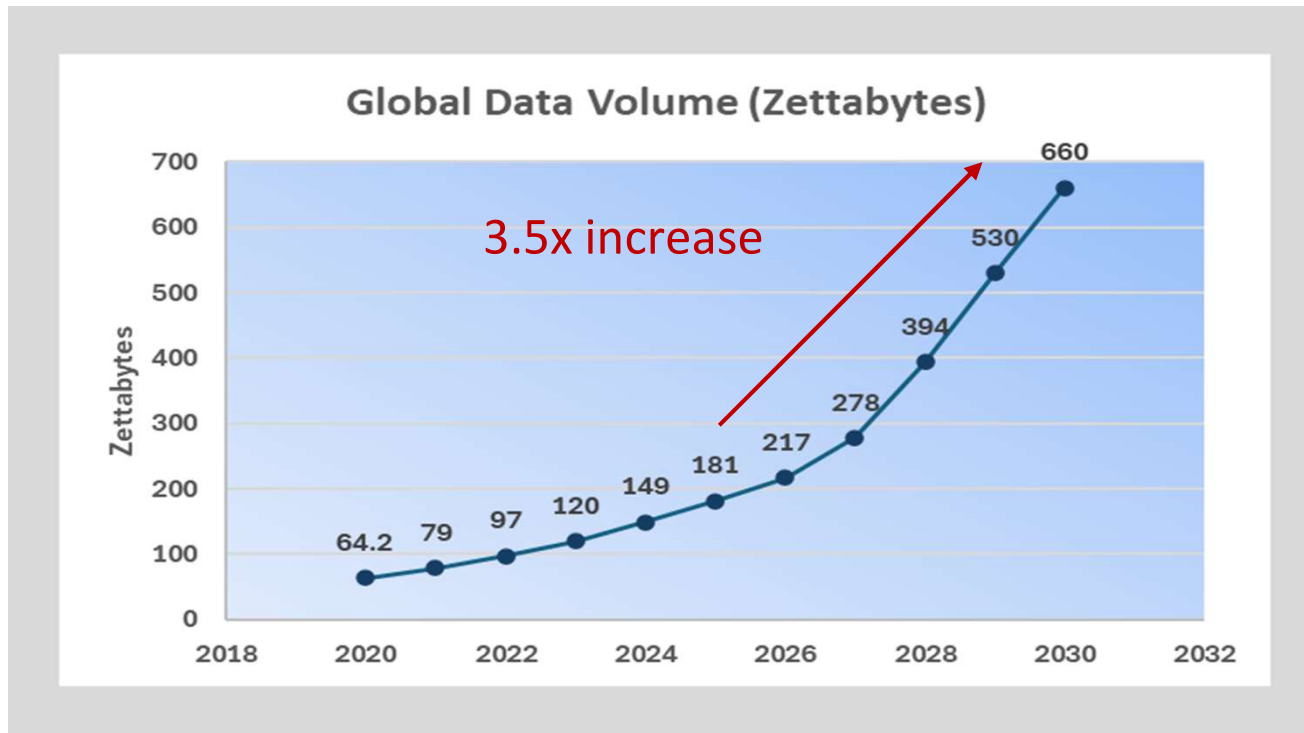


Source Supermicro/Nvidia Whitepaper, "AI-Powered Telecom"

AI in telecom will grow from \$2.66B in 2025 to \$42.66B in 2033 — a 15X increase

Generative AI is emerging as a key area of interest as telecom companies ramp up their AI investments.

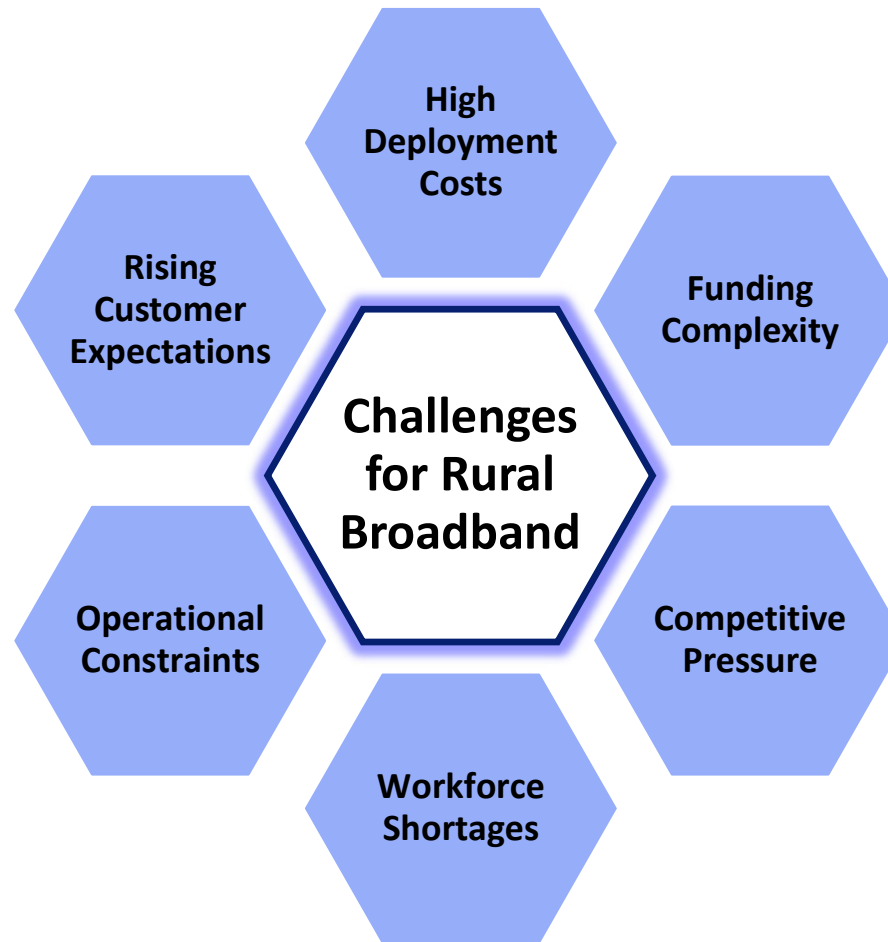
AI Adoption is Driving Explosive Data Growth



- Generative AI Market → \$103.5B in 2025 growing to \$356.1B by 2030 (3.4X growth)
- 70% of businesses use AI to accelerate content and data creation
- 60%+ of enterprise apps already have built-in AI (2025); 84% of users expanded their AI usage in the past year

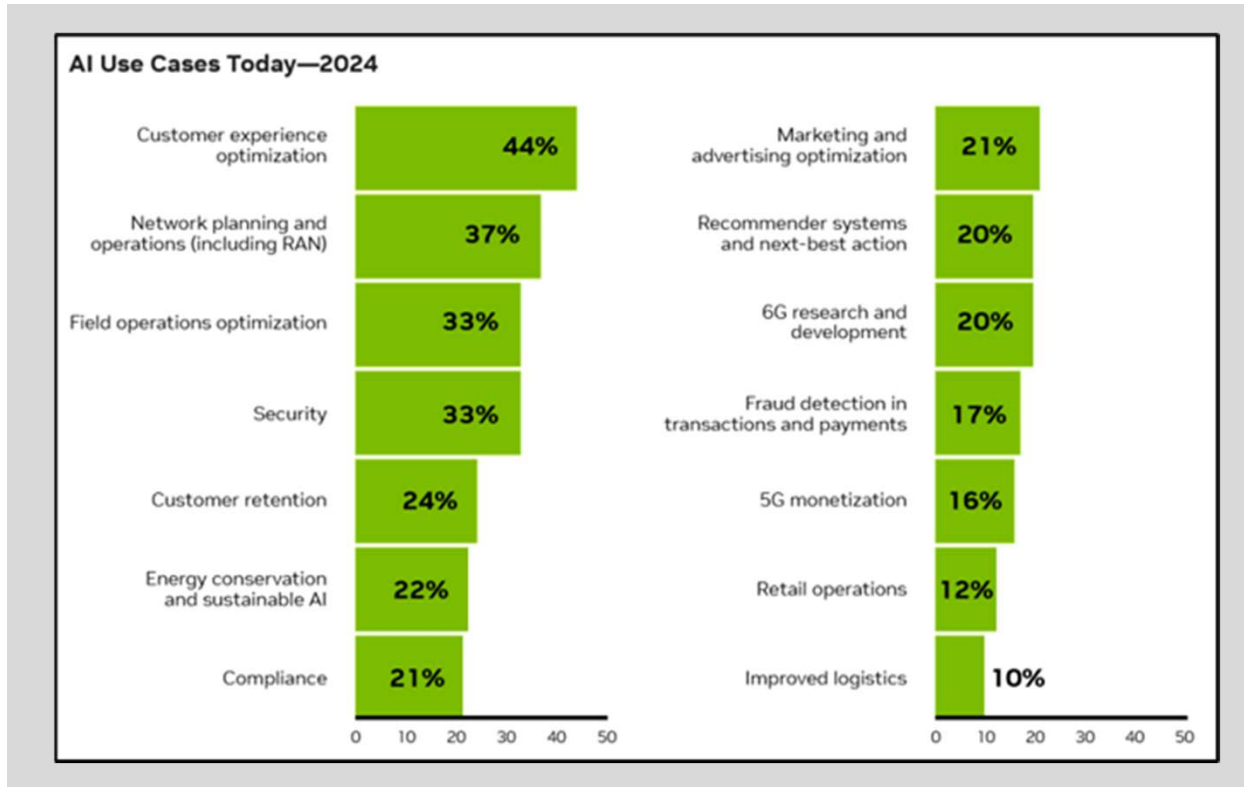
Source: Statista (2024), Rivery (2025), Cybersecurity Ventures (2025), Edge Delta (2025), and Huawei (2024)

Challenges Facing Rural Broadband Providers



The road is difficult, but with the right approach, challenges can turn into opportunities.

How AI Helps Solve These Challenges

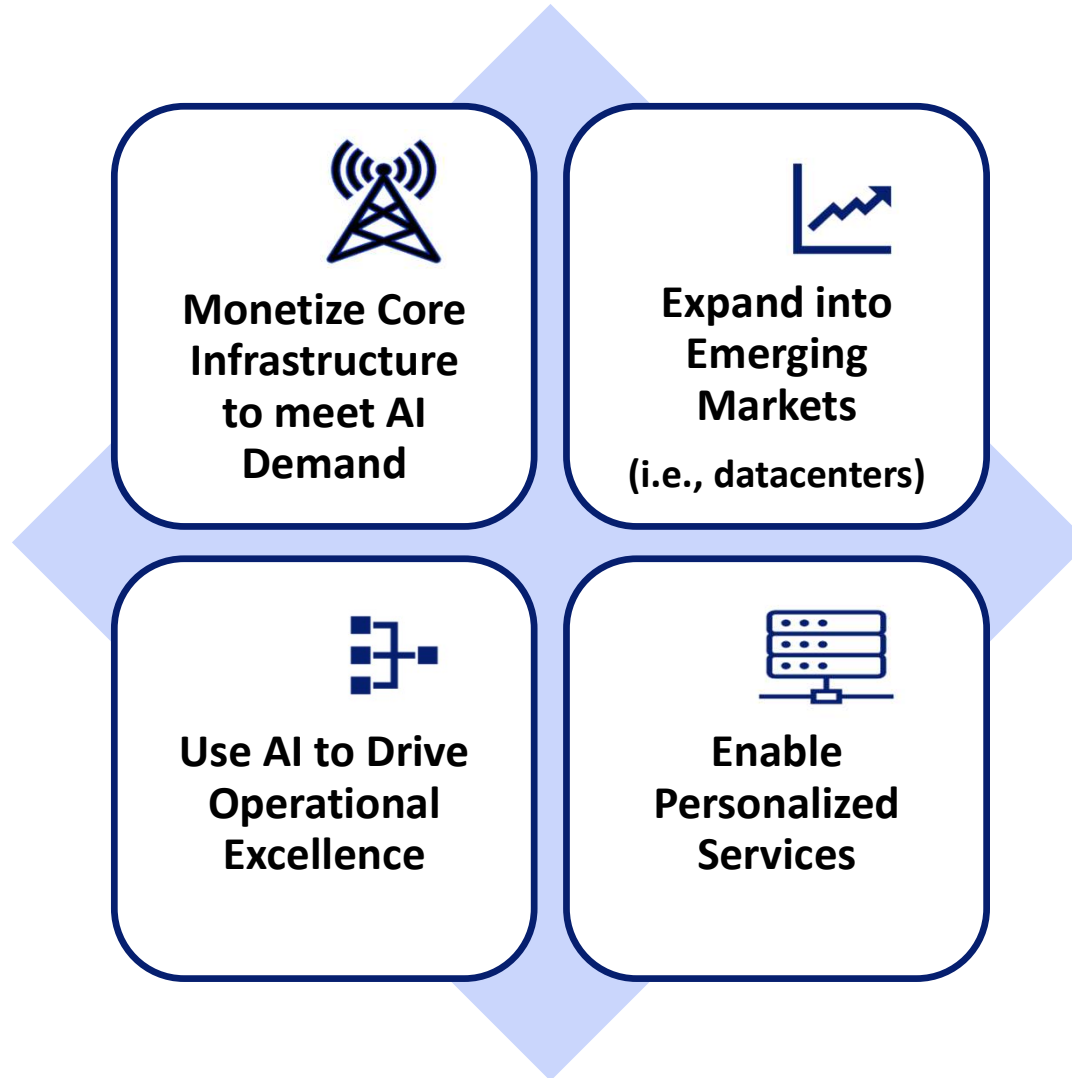


- Adoption is strongest in customer-facing and network operations work
- Efficiency and risk use cases lead today; growth and monetization use cases are earlier stage

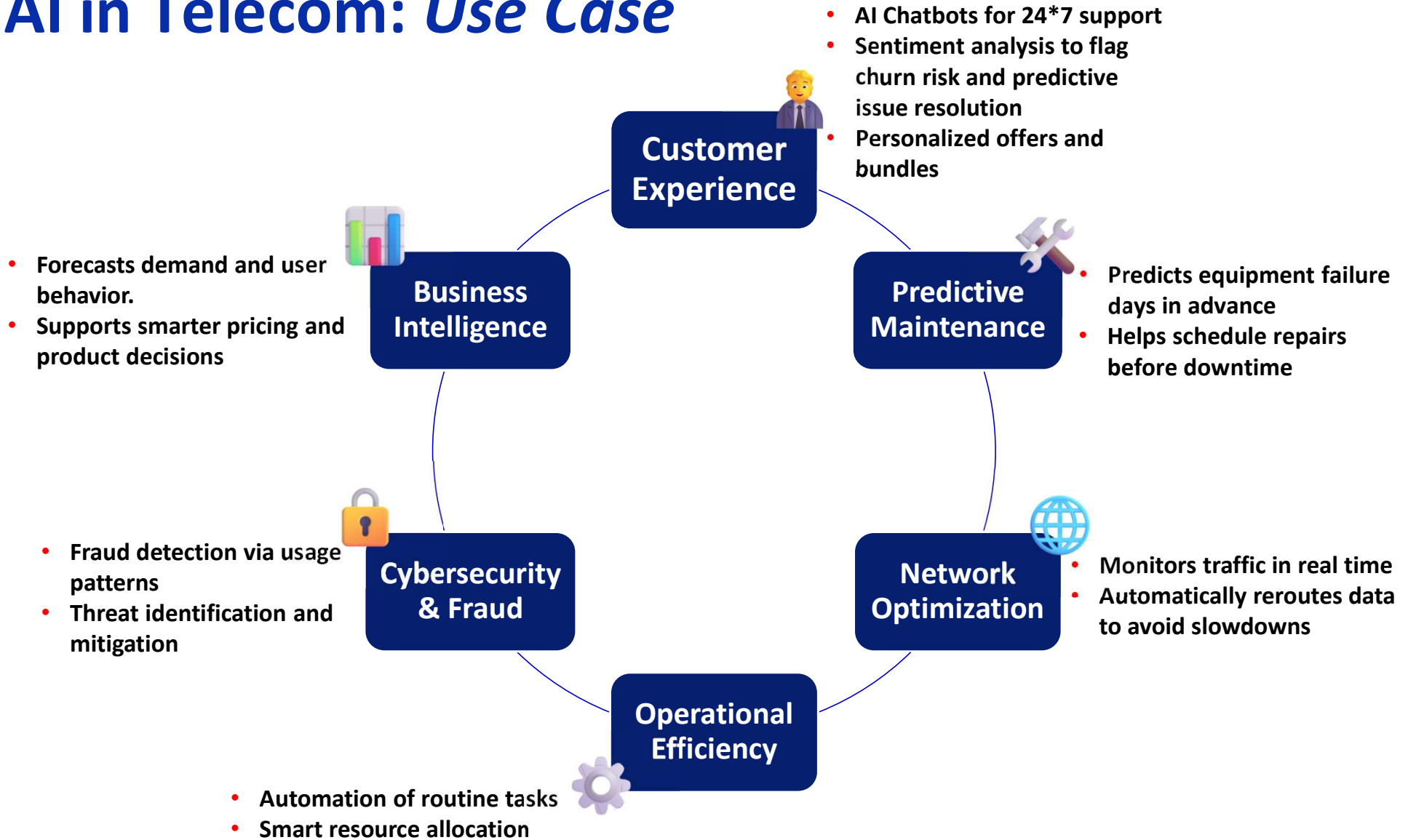
Source: Nvidia



Where AI Creates Value in Rural Telecom






AI in Telecom: *Use Case*

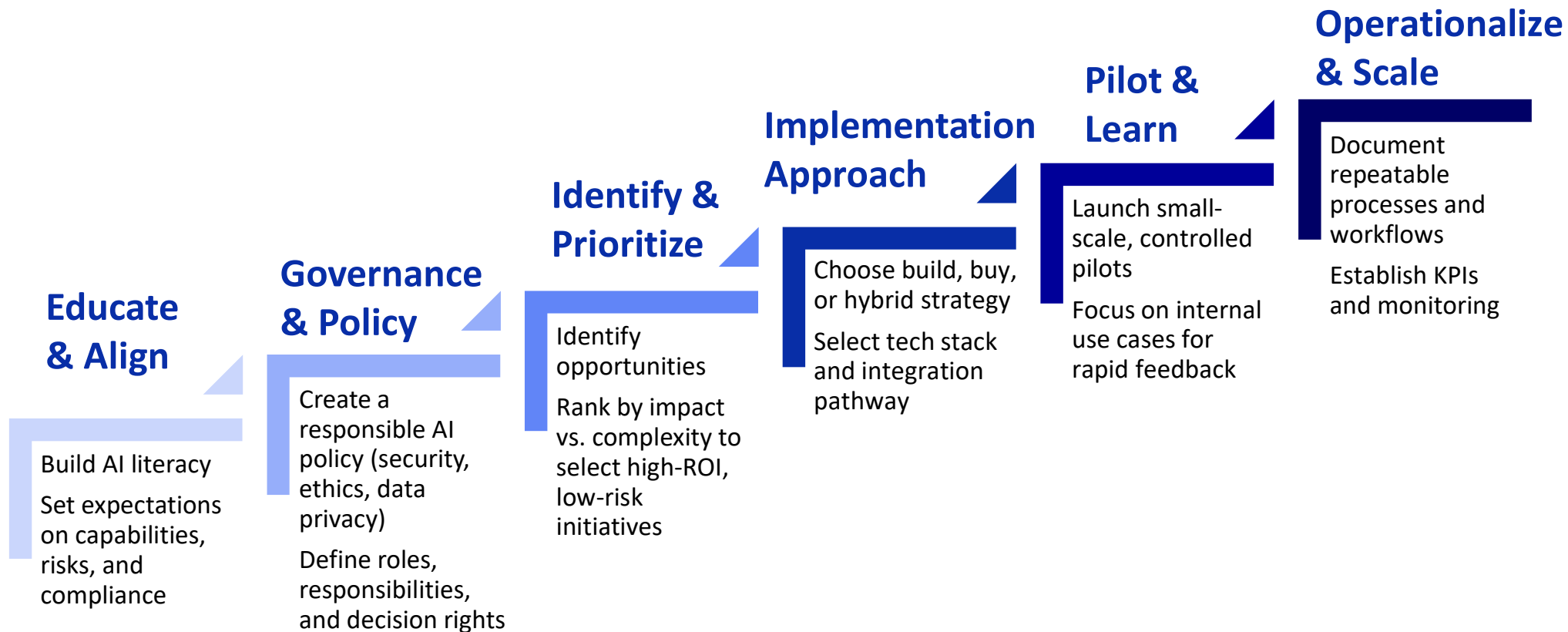


Telecom operators face increasing pressure to deliver faster, more reliable service, while managing rising complexity and cost. AI is becoming essential to stay competitive.

AI in Telecom: *Real – World Examples*

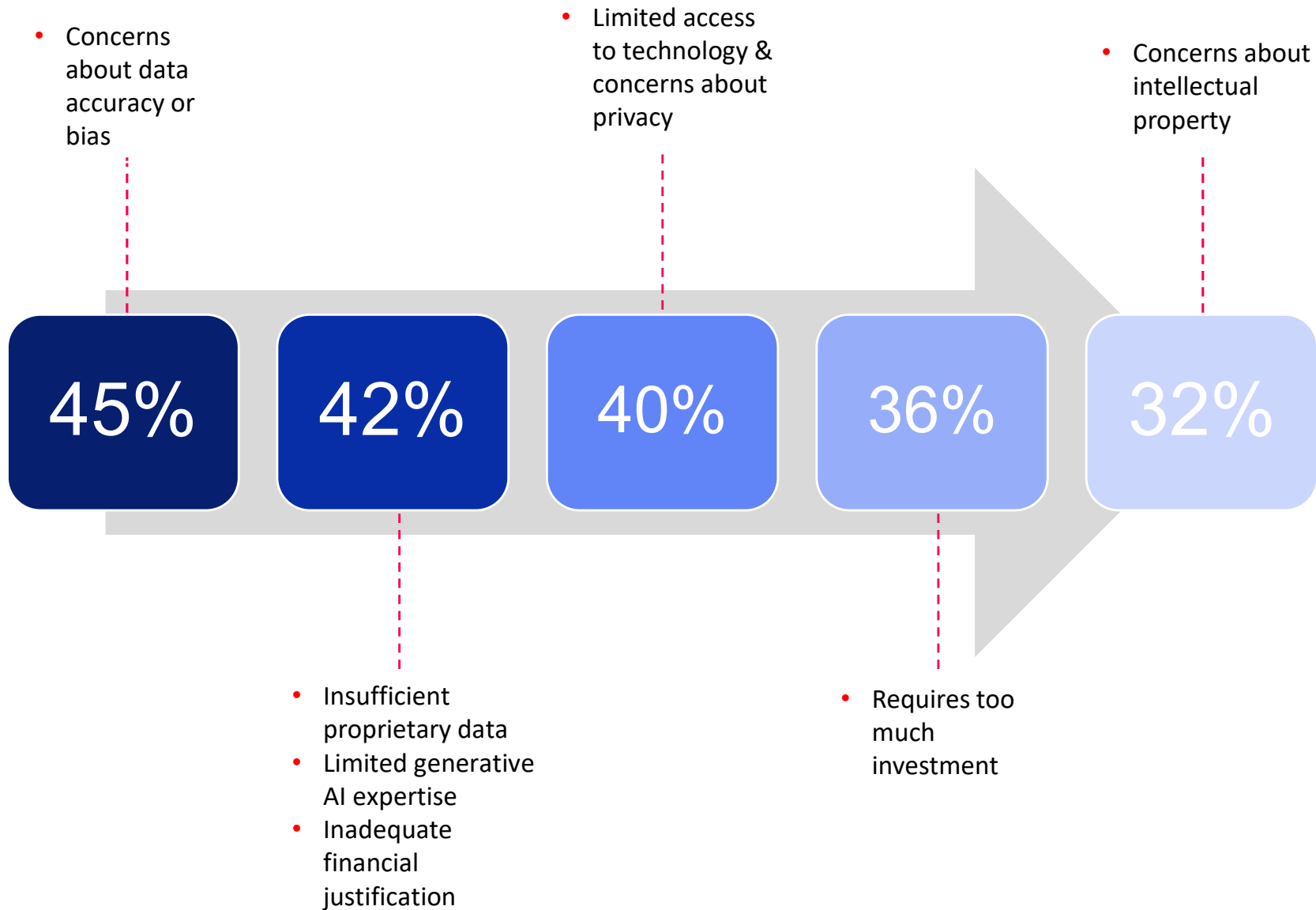
	Use Case	What They Did	Results
	Network optimization & Predictive Performance	Implemented ML algorithms to analyze traffic and proactively resolve disruptions	<ul style="list-style-type: none">• 35% reduction in network congestion• 22% improved network performance
	Fraud Prevention & Security	Utilized AI algorithms to monitor transactions and detect fraud in real time	<ul style="list-style-type: none">• 92% fraud detection accuracy• €50M+ estimated annual savings
	Customer service automation	Launched AI chatbot across 11 markets for billing and support	<ul style="list-style-type: none">• Checkout time cut by 47%• Doubled conversion rates

AI Implementation Roadmap



Find the right use case, launch small, learn fast, and scale what works. Then do it again.

Enterprise AI Adoption Challenges



Source: IBM, "The Ingenuity of Generative AI"

Coming Up Next: *AI Agents and AGI*

- **Next Evolution:** Beyond chatbots → cognitive systems with memory, reasoning, and execution (action)
- **Types:** Digital (software) and Physical (robotics) agents
- **No-Code Deployment:** Easy to launch, zero coding required
- **Market Growth:** \$7.3B in 2025 → \$47.1B by 2030 (44.8% CAGR)
 - 51% of organizations are actively exploring AI agents; 37% are piloting
- **Path to AGI:** Stepping stone toward Artificial General Intelligence (AGI)
 - AI that can handle many different tasks, reason, and use tools with little retraining
 - *Ex:* One assistant that spots an outage, opens a ticket, schedules a tech, updates the customer, and closes billing end to end.



Source: Neurond AI & KPMG

AI Risks and Considerations

Today's Top Concerns

- **Data Privacy** – Misuse or exposure through AI tools
- **Misinformation** – Fabricated or inaccurate outputs
- **Regulatory Uncertainty** – Shifting compliance rules
- **Cybersecurity Gaps**: New vulnerabilities from AI tools
- **Org Readiness**: Adoption outpacing safeguards

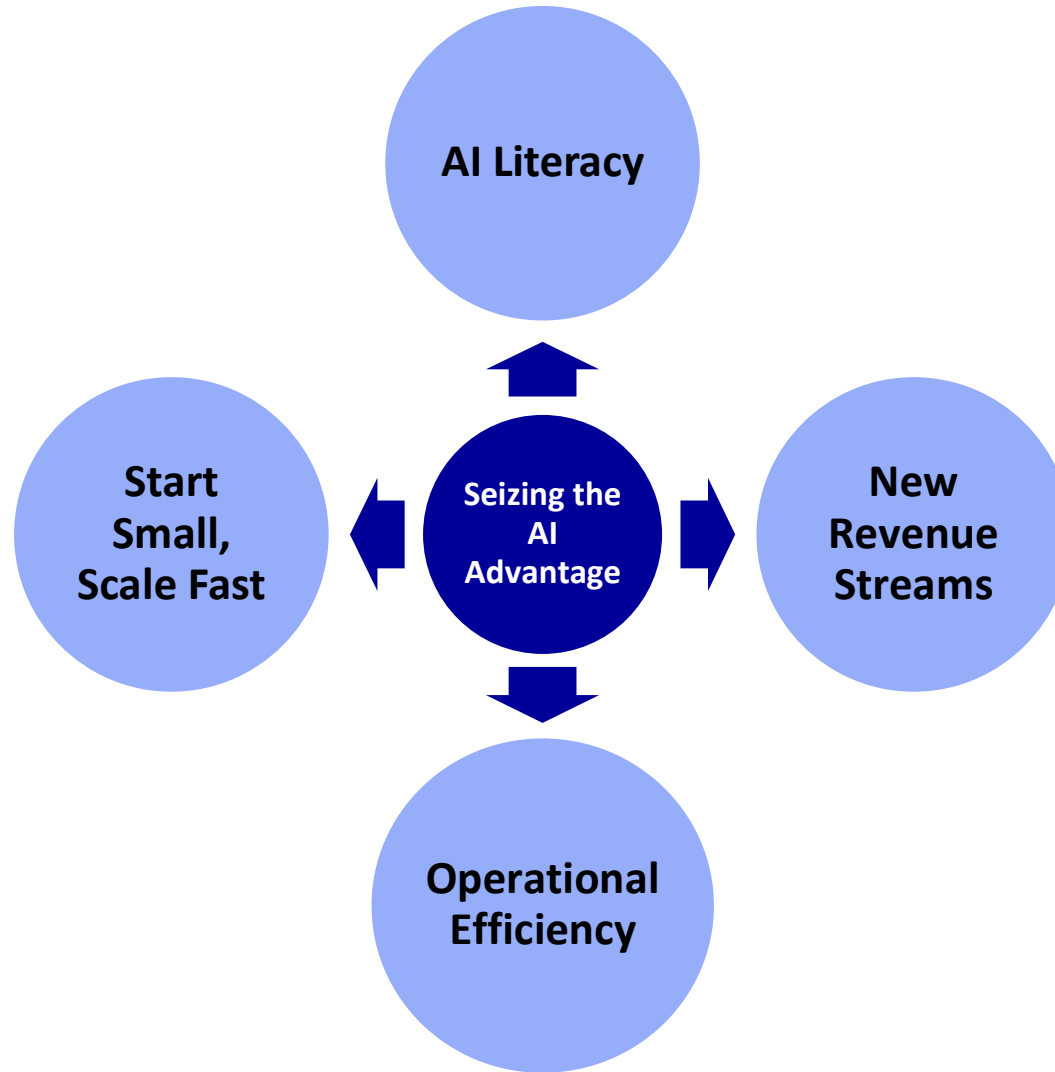
Emerging Threats

- **Bias & Ethics**: Reinforcing inequities
- **Deepfakes & Voice Fraud**: Undermining trust in communication
- **Vendor Overdependence**: Lock-in with platforms
- **Agentic AI**: Autonomous actions without human review
- **Lack of Governance**: Few firms have audit framework

Why This Matters

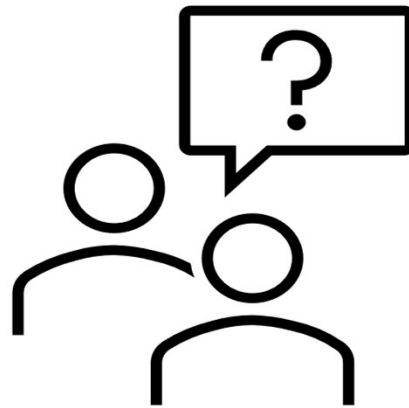
- **60%** report new cyber risks
- **77%** fear brand damage from AI
- **<30%** have governance policies

The Road Ahead



AI isn't the real threat. The real risk is falling behind those who know how to use it. To remain relevant in your career or business, developing AI literacy is no longer optional.

Questions???



Contact Information

Nova Patel

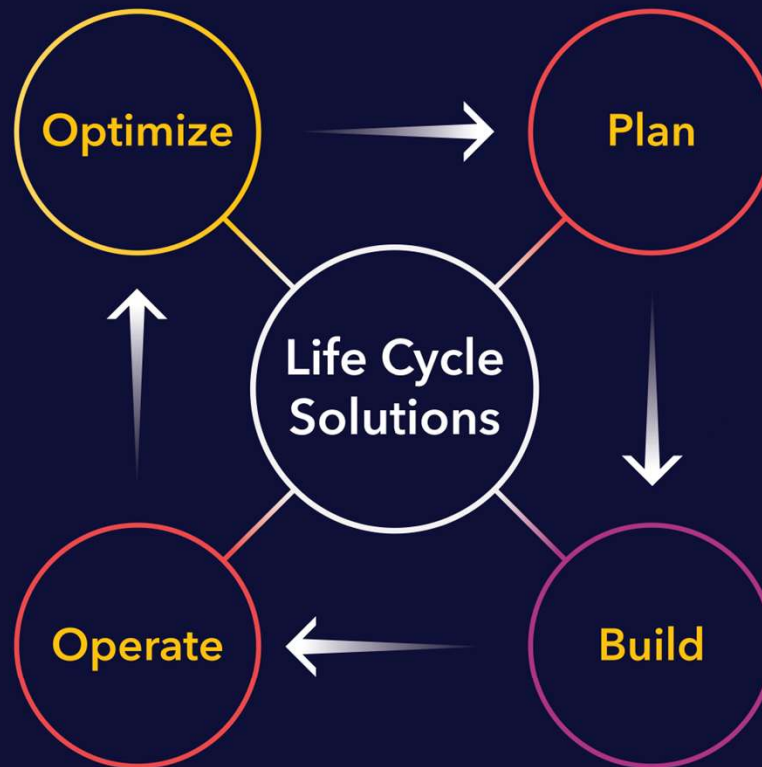
Executive Business Consultant

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About JSI Tel

- Valuations & Corporate Transactions
- Business Analytics/Peer Group Studies
 - Service & Bundling Cost Analysis
- Financial, Regulatory & Network Audits
 - Cybersecurity Audits & Training
- Disaster Prevention & Recovery Training

- Network Management Service (NOC+)
 - DDoS Mitigation
- Layer 2/3 Switching/Routing Service Management
 - Numbering & Porting/SOA & AOCN Services
 - State & Federal Compliance & Reporting
- Cost Separations Studies/Continuing Property Records



- Broadband Funding Application Support
- Broadband Service Mapping
- High-Level & Detailed Fiber & Network Designs
- Feasibility Studies/Business Cases
- Multi-Year Financial Forecasts
- Federal & State Advocacy

- Fiber Construction Management
- Broadband Network Mapping
- Broadband Network Engineering & Deployment
- Service Pricing/Tariff Development
- Regulatory Filing Support
- Billing Systems & Related Services

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