

Private 4G/5G Networks Driving Operational and Strategic Gains for Enterprises



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In This InfoBrief

This IDC InfoBrief examines the opportunity presented by private 4G/5G networks and their ability to drive improved employee productivity, operational efficiencies, automation, and bottom-line benefits. Companies are increasingly elevating connectivity, in all its forms, to a strategic imperative for the organization.

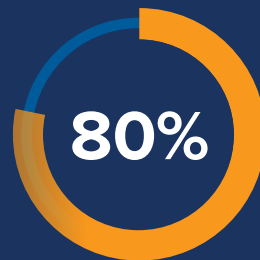
Private 4G/5G networks provide robust, secure foundational connectivity for today's operations and serve as an innovation engine to streamline the adoption of advanced digital transformation solutions that provide key organizational agility and resilience to businesses of all types and sizes.

This InfoBrief leverages insights from more than 400 respondents to IDC's *North American 5G, IoT, and Private Mobile Networks Survey* (December 2023) and 700+ participants in IDC's *Future of Connectedness Survey* (June 2023). These surveys aimed to understand the buyer perspectives from IT decision makers around connectivity and its strategic value to the enterprise.

Companies are challenged with disparate, inconsistent, and disconnected operations.



More than one-third of companies indicate that their current state of digital connectivity is rudimentary, with significant siloing and underutilization of integrated voice, data, and automation.



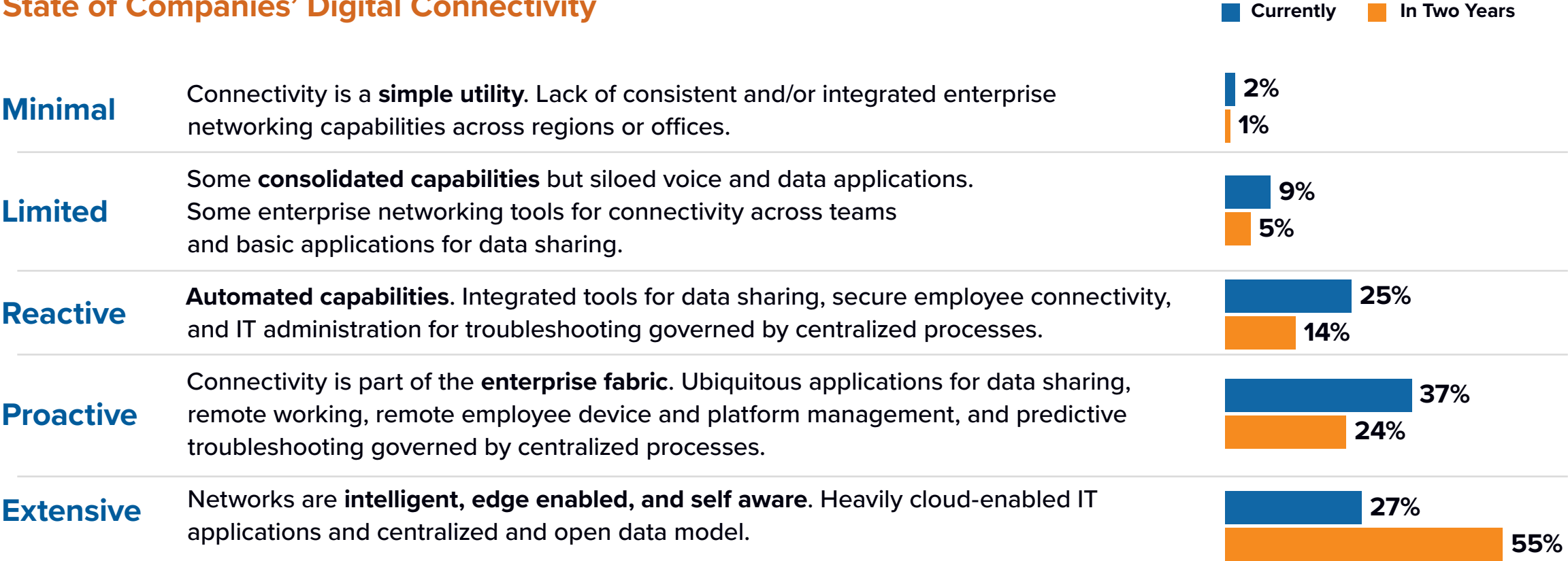
By 2025, nearly 80% aspire to establish connectivity as a foundational innovation engine for pervasive data sharing, decision-making, and intelligent networking.

n = 770, NA; 252, Source: IDC's 2023 *Future of Connectedness Survey*, June 2023

Companies are challenged with disparate, inconsistent, and disconnected operations.

(continued)

State of Companies' Digital Connectivity



n = 770, NA: 252, Source: IDC's 2023 Future of Connectedness Survey, June 2023

Connectivity is viewed as critical for driving improvements in customer experience, operations and employee connectivity.

Connectivity creates a framework for gaining mission-critical insight into customer preferences, enabling real-time, autonomous operations and realizing material improvements to the bottom line.

Top 3 most important business outcomes from new and ongoing connectivity initiatives in the past 12 months

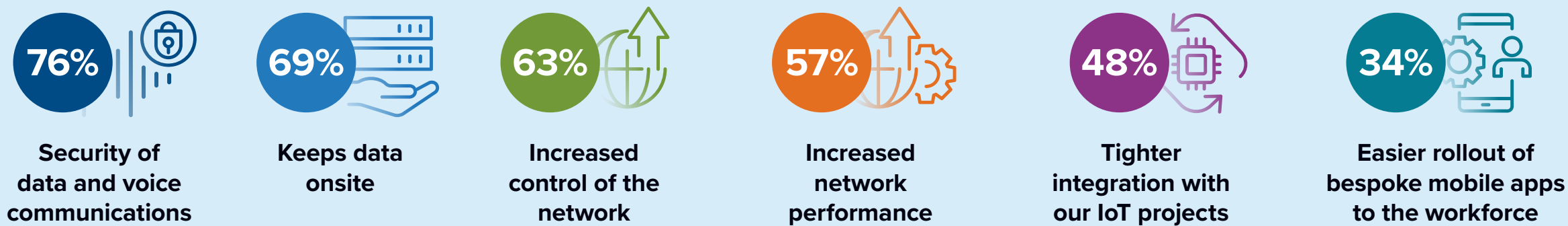


Source: 2023 Future of Connectedness Survey, IDC, June 2023, N = 770, NA = 252

Enterprises see private 4G/5G networks as addressing key connectivity challenges around security, network control, and greater digital innovation.

Though zero trust connectivity often initiates the private 4G/5G network conversation, equally if not more important is the reliable, scalable connectivity that they provide. Private 4G/5G networks provide a platform that streamlines the deployment and integration of Internet of Things (IoT) and mobile use cases across the facility or corporate campus with company data remaining onsite.

Key Drivers of Private Network Deployments



n = 307; Source: IDC's North American Enterprise 5G, IoT, and Private Mobile Networks Survey, December 2023

Private 4G/5G networks provide the foundation for a myriad of use cases.

While employee centric use cases (site connectivity, employee safety, connected workforce) are top of mind for companies planning private 4G/5G networks over the next two years, industrial automation and a mix of sustainability-related applications (utilities, environment, and building centric) remain central drivers of key benefits.

Top 5 Use Cases for Private 4G/5G Networks



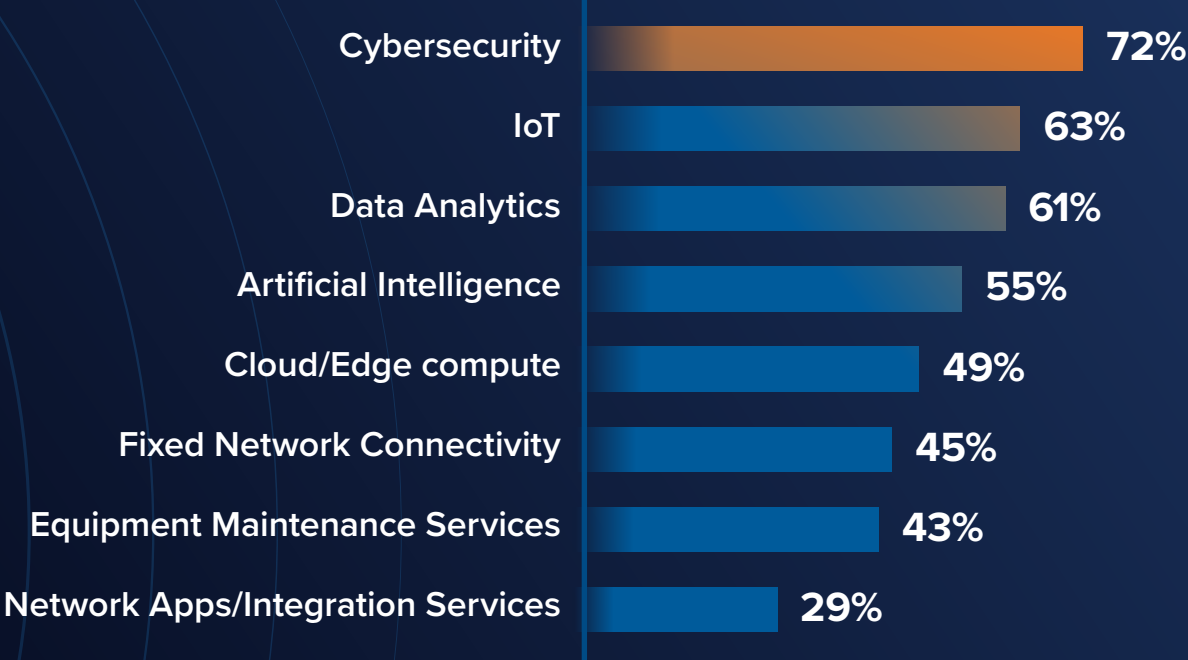
n = 307; Source: IDC's North American Enterprise 5G, IoT, and Private Mobile Networks Survey, December 2023

Private 4G/5G networks are a mission-critical enabler of other digital transformation capabilities.



Like many technologies, private 4G/5G networks have a critical role as an enabling technology, allowing innovations such as edge computing, data analytics, and artificial intelligence to extend the reach and variety of data inputs, scale across the organization, and return actionable, real-time insights.

Leading Capabilities to Pair with Private 4G/5G Networks



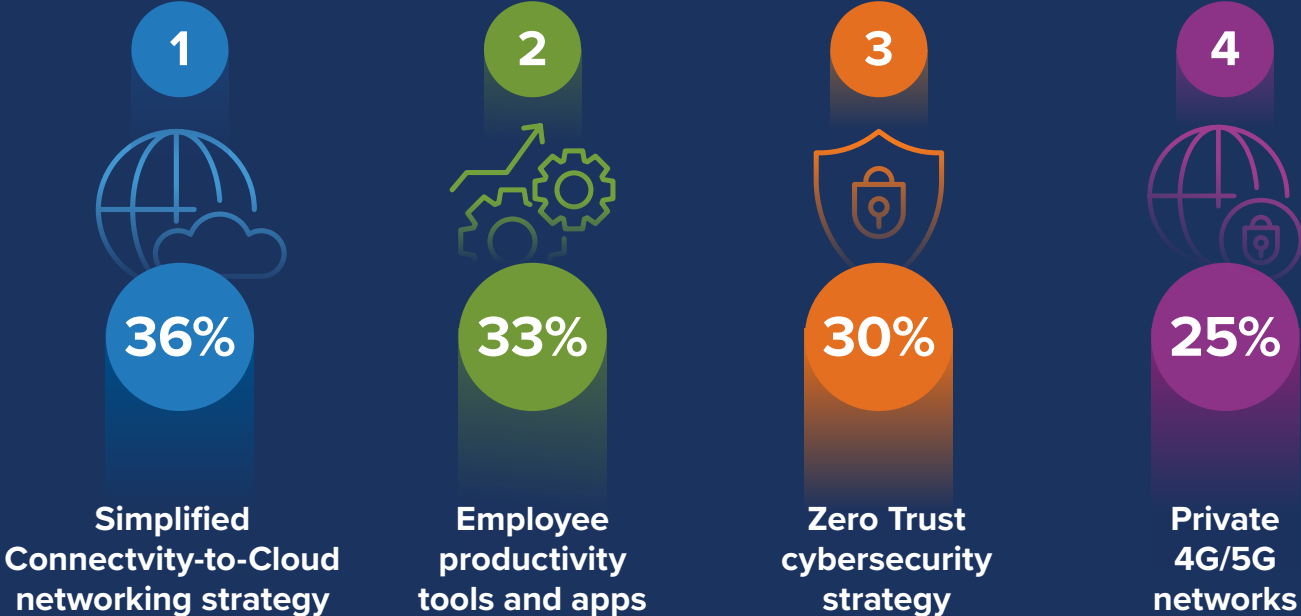
n = 307; Source: IDC's North American Enterprise 5G, IoT, and Private Mobile Networks Survey, December 2023

Private 4G/5G networks are increasingly seen as strategic priority for businesses.

Top 4 Planned Strategic Connectivity Investments

The reliable, scalable, and secure connectivity made possible through private 4G/5G networks is an innovation platform for the digital-native business, enabling the deployment, management, and even automation of a diverse mix of use cases.

Increasingly, businesses see private 4G/5G networks as foundational for their digital-native strategic priorities (24.9%) — the bedrock upon which the success of other connectivity-related investments (cloud networking, productivity, and security) depends.



Source: IDC Future of Connectedness Survey, June 2023, Respondents with 500-999 employees, N = 192

Successful private 4G/5G network deployments demand methodical preparation and collaboration.

1 Know what you already have

Inventory existing connectivity deployed throughout the organization to identify redundancies, gaps, and sub-optimal usage.

2 Make connectivity play together in the sandbox

Leverage learnings from the connectivity inventory (#1) to identify the most effective use of private 4G/5G networks, remembering that private 4G/5G networks do not render past investments in connectivity obsolete. They must be integrated into existing networks for a robust, seamless flow of information, insights, and control across the organization that maximizes the return on all connectivity investments.

3 Get everyone at the table

Understanding the value of a private 4G/5G network to the organization requires input from all stakeholders — C-suite, IT, OT, and line of business leadership — to ensure design and performance serve as many use cases as possible.

4 Plan for measurement

A firm understanding of the key performance indicators that will define the success of your private 4G/5G network deployment will streamline the business case for investment and ensure that the network and use cases can demonstrate the value and ROI to multiple stakeholders.

5 Find your lead partner

Private 4G/5G networks combined with many use cases are an ecosystem play, with communications service providers, network OEMs, app developers, and industrial equipment manufacturers coming together to provide integrated solutions. Look for a lead contractor with private 4G/5G experience and a portfolio of complimentary solutions, such as cybersecurity and MEC resources, that can operate in a vendor-agnostic environment.

6 Look to today and tomorrow

Target both near- and long-term use cases to notch early wins and demonstrate return on investment and build confidence in the long-term possibilities and benefits of private networks.

About the IDC Analyst



Jason Leigh

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Jason Leigh is responsible for 5G and mobile services research, covering the gamut of wireless services, including corporate smartphone plans, 5G use case development, IoT connectivity management, and private 4G/5G networks. Jason's research focuses on the strategic implications and market opportunities presented by the emerging 5G ecosystem, including commercial availability, installed base forecasts, regional adoption trends, content and services enablement, device impacts, 5G's role in the Internet of Things, and innovative use cases leveraging 5G.

[More about Jason Leigh](#)

Message from the Sponsor



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