451 Research

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Edge computing and private cellular networks: The road ahead



IoT smart device growth combined with AI, big data and 5G is fueling the demand for private wireless networks





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000 000 Wi-Fi is not always the most economical solution

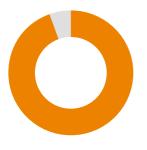


Outdoors, a private cellular access point can cover 1 square mile

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Wi-Fi only covers 10,000 square feet

5G can make prohibitively expensive use cases more affordable and implementable



95%

of enterprises plan to deploy an on-site private network to support their IoT initiatives (n = 293)

And



42% prefer a private **cellular** wireless network (LTE/5G) provided by a telecom operator

Demand is driven by three **top use cases**

(n = 235)



53%

Vision analytics, movement tracking with cameras



2% Robotics and autonomous vehicles



41% Future unanticipated workloads



But challenges

remain in deploying private networking

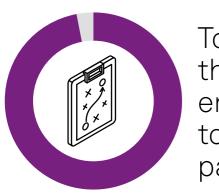
(n = 235)



43% Interoperability issues



Unreliability unknowns





To overcome these, 97% of enterprises turn to a strategic partner for help

Of these:

34% choose a managed service provider partner

24% opt to outsource to a systems integrator partner

Sources: 451 Research Voice of the Enterprise: Internet of Things, IoT Connectivity - Private Network July 2022; Intelligent Edge Study 2021

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Read the <u>451 Research Vanguard Report</u> (June 2022) on The Intelligent Edge Stack and What it Means for Industrial Enterprises

Or visit the Kyndryl Private Wireless Services website

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