













# AI/LLM for Networking - Use cases




LFN Strategy document

# 10 Use cases suggested by the market

Use Case	Description	Relevance to LFN	New Project Potential	Mentions
1. Network planning and design 	Using generative AI for Placement of small cells, MIMO antennas, beamforming, and backhaul connections	M	V	<ul style="list-style-type: none"> <li><a href="#">Generative AI in Telco – Revamping 5G Network Planning and Optimization</a></li> <li><a href="#">The AI-native telco: Radical transformation to thrive in turbulent times   McKinsey</a></li> </ul>
2. Predictive Maintenance 	Using AI for equipment failure predictions	M		<ul style="list-style-type: none"> <li><a href="#">Generative AI Solutions in Telecom Industry - Real Time AI Company</a></li> <li><a href="#">Potential Of Generative AI for Enterprises: Statistics, Use Cases, Top Business Examples</a></li> </ul>
3. Automated closed loop 	Network assurance using AI models trained on operational data	H		<ul style="list-style-type: none"> <li><a href="#">Telcos. Stop Debating Generative AI and Just Get Going   Bain &amp; Company</a></li> <li><a href="#">Microsoft dangles generative AI for telcos and slams 'DIY' clouds   Light Reading</a></li> </ul>
4. Network AIOps 	Use AIOps methodologies to automate and streamline network operations	H		<ul style="list-style-type: none"> <li><a href="#">Amdocs Launches amAlz, a Cutting-Edge Enterprise-Grade Generative AI Framework</a></li> <li><a href="#">Omdia Telco Network and Service Automation Market Report</a></li> </ul>
5. SON 	Using AI based algorithms for Self Organizing Networks	H		<ul style="list-style-type: none"> <li><a href="#">Generative AI Solutions in Telecom Industry - Real Time AI Company</a></li> </ul>

# 10 Use cases suggested by the market (cont'd)

Use Case	Description	Relevance to LFN	New Project Potential	Mentions
6. Tech Assistant 	In-field AI based tech assistant providing real-time guidance based on AI models	L	V	<ul style="list-style-type: none"> <li><a href="#">Telcos, Stop Debating Generative AI and Just Get Going   Bain &amp; Company</a></li> </ul>
7. Code generation for network protocols 	Co-pilot functionality for generating software implementation of network protocols specifications (3GPP, ETSI, Etc.)	L	V	<ul style="list-style-type: none"> <li><a href="#">Microsoft dangles generative AI for telcos and slams 'DIY' clouds   Light Reading</a></li> </ul>
8. RAN Capacity Forecasting 	Using AI, CSPs can more accurately predict the load on each RAN site to avoid making expensive upgrades before they are necessary	M	V	<ul style="list-style-type: none"> <li><a href="#">DataRobot - AI in Telecommunications</a></li> </ul>
9. Traffic management 	As utilization increases in a particular location or at a certain time of day, traffic can be re-routed to available capacity and resources.	H		<ul style="list-style-type: none"> <li><a href="#">DataRobot - AI in Telecommunications</a></li> </ul>
10. Shared AI and 5G infrastructure 	Leverage unused 5G RAN infrastructure resources for LLM training and inference (Nvidia)	M		<ul style="list-style-type: none"> <li><a href="#">NVIDIA Collaborates With SoftBank Corp. to Power SoftBank's Next-Gen Data Centers Using Grace Hopper Superchip for Generative AI and 5G/6G</a></li> </ul>

-  Network Design
-  Network operation
-  New Technology



Got more?

If you are aware of other use cases, or would like to add more information about the 10 use cases mentioned here, please reach out to Ranny Haiby

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