

5G & EdgeAI

Delivering value across critical sectors



Ilhem Fajjari



Paving the Way: synergizing 5G and Edge for enhanced value

Telco Network Openness

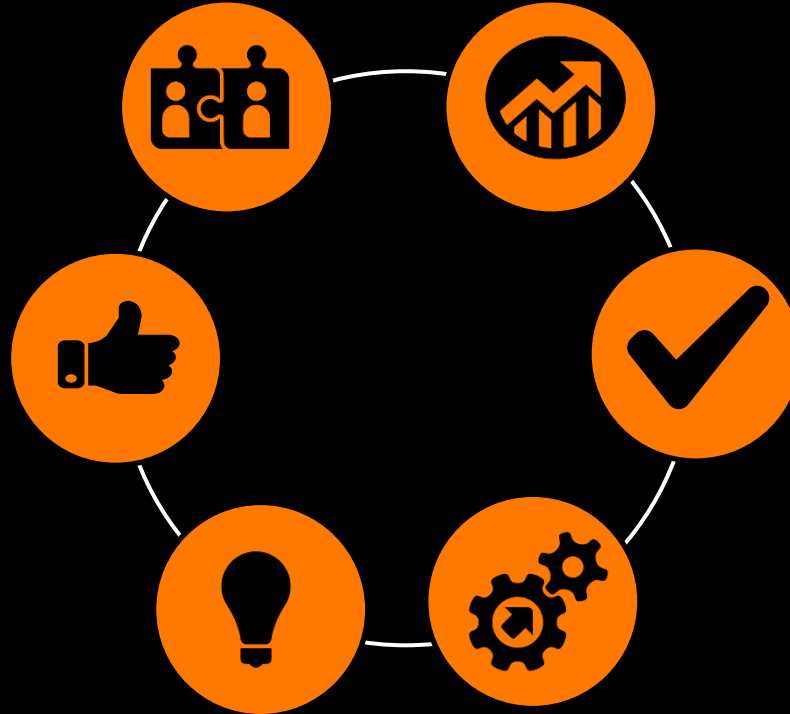
Provide opportunities for new players to enter the market, fosters data localization, and stimulates collaboration

Enhanced Quality of service

Offers low latency, high-bandwidth and improve the network efficiency

Continuous Innovation

Develop new services, applications, and business models across a wide range of industries and use cases



Asset Profitability

Leverage Network Edge infrastructure to enable the development of low-latency services

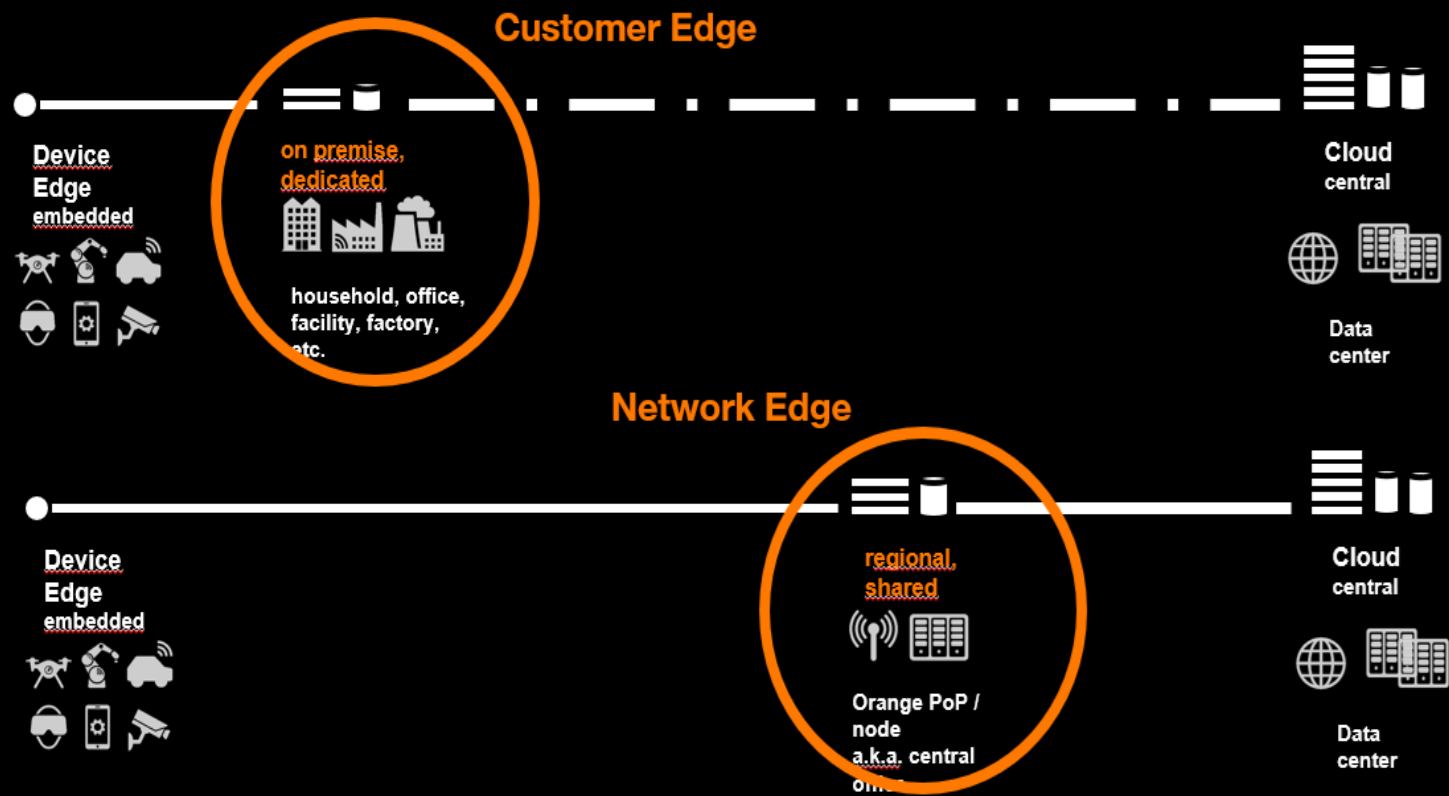
Safe Conditions

Provide, guaranteed latency, immediate data processing, redundancy, enhanced monitoring, and real time alerts

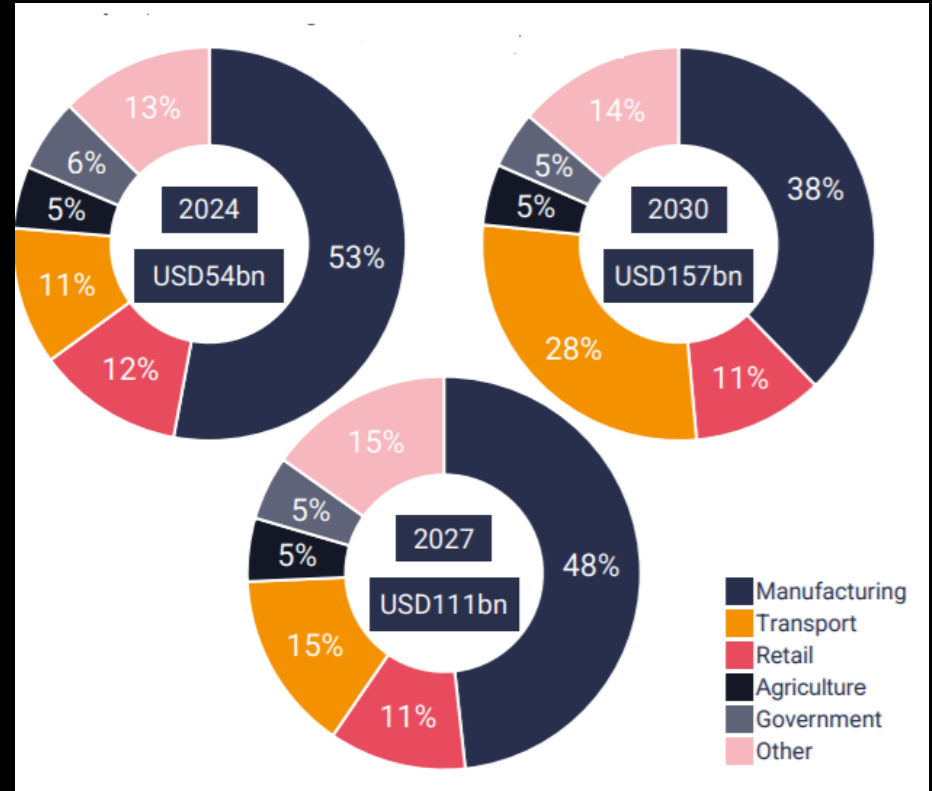
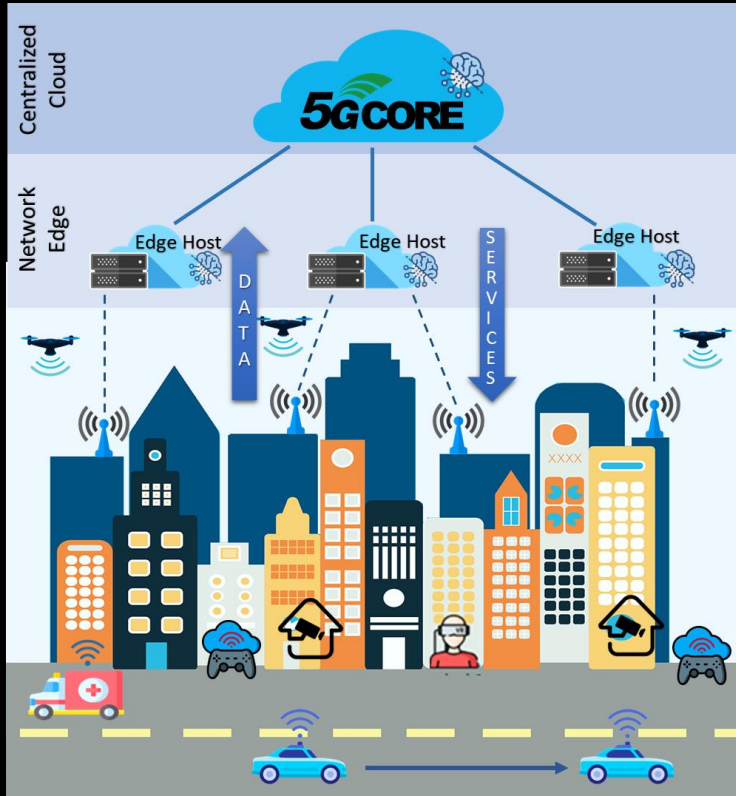
Operational Efficiency

Ensure agile and cost-effective operations, better decision-making, and improved user experiences

From Device to Cloud: understanding the edge layers



Global Edge Computing addressable revenue by vertical – 2023, 2027 and 2030



*Source: STL Partners - January 2025

Unlocking sectoral value with 5G and Edge AI

Smart City

Scope: Process data locally from cameras, sensors, and connected infrastructure to enable real-time decisions for traffic control, energy optimization, and public safety

5G Added Value: Ultra-low-Latency, High bandwidth, massive IoT support, network slicing

Edge AI Added Value: Local AI decision making, privacy & sovereignty, faster reaction time, reduced backhaul and improved efficiency, resilience

Manufacturing

Scope: Analyze machine and sensor data directly on-site to detect anomalies, predict equipment failures, and optimize production processes in real time

5G Added Value: Private 5G networks, scalability and flexibility, reliable connectivity, high-density IoT

Edge AI Added Value: On-site processing, enhanced cybersecurity, operational continuity, real-time process optimization

Healthcare & live sciences

Scope: Local processing of patient data from medical devices and wearables, supporting real-time diagnostics and continuous monitoring

5G Added Value: Fast & reliable data transfer for telemedicine, ubiquitous coverage, mobility

Edge AI Added Value: Real-time processing, local inference, privacy & data sovereignty, operational efficiency,

Unlocking sectoral value with 5G and Edge AI

Government & Public Sector

Scope: Rely on highly secure, resilient, and real-time systems to support command, control, surveillance, tactical decision-making
5G Added Value: Ultra-reliable low-latency communications, high-bandwidth and device density, mobile coverage continuity, dynamic network slicing
Edge AI Added Value: Fast response to emergencies, offline operability, sovereignty & confidentiality

Telco

Scope: Improve customer experience through predictive and real-time analytics, enable smarter operations, reduce network TCO
5G Added Value: Dynamic network slicing, Ultra-low latency, Massive device support, Seamless handover and mobility
Edge AI Added Value: Real-time network management, AI-enhanced UC apps Data sovereignty & compliance

Media & Entertainment

Scope: Personalized video streaming via generative AI and AI-optimized CDN
5G Added Value: High-bandwidth connectivity, ultra-low latency, mobility & seamless coverage
Edge AI Added Value: On-the-fly content optimization, real-time personalization, sovereignty & rights management, AI-based moderation & compliance

Opportunities and challenges for Edge AI in a sovereign 5G future



- Ultra-low latency and high bandwidth
- Reliable distributed infrastructure for proximity to customers
- Supports sovereignty and GDPR compliance
- Enables critical AI use cases



- High initial investment costs for edge infrastructure rollout
- Dependence on non-EU suppliers
- Limited edge computing coverage
- Slow adoption for some sectors
- Capability gaps in large-scale AI deployment



- €150B+ market for Edge AI by 2030
- Strong policy support in Europe for digital sovereignty & edge infras
- Strategic use cases
- Partnerships with European providers
- Differentiation from hyperscalers by offering regulated & secure services



- Fast expansion by hyperscalers
- Growing complexity of compliance
- Security vulnerabilities increase
- Regulatory delays and fragmentation
- Lower adoption by traditional sectors

