

Transformative social inflection points



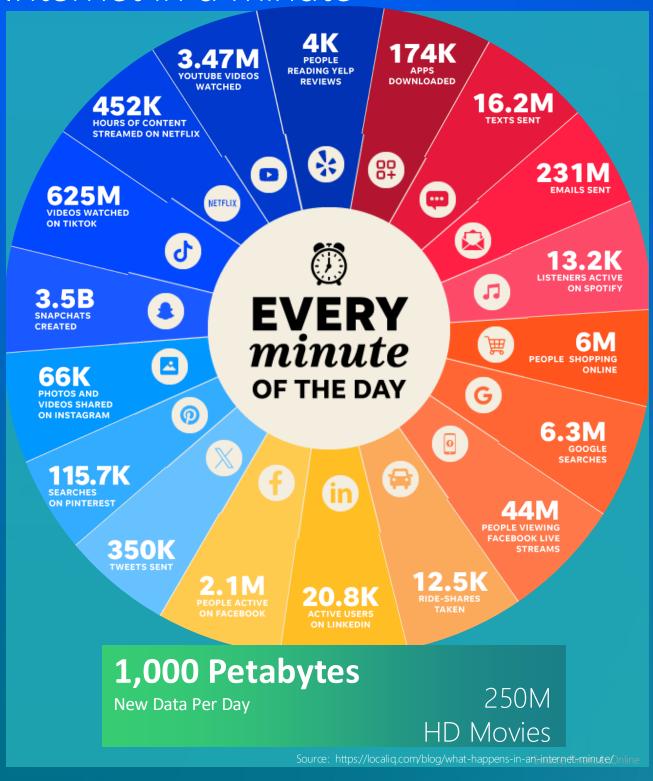


Telecom Today



Mobile Connections: around 9 billon subscriptions in 7 million sites

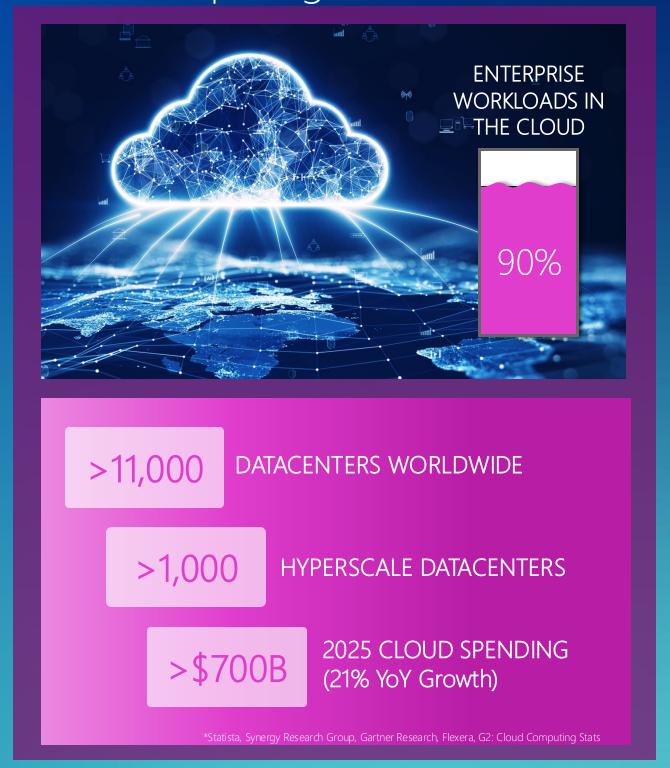
Internet in a minute



Fiber deployments



Cloud computing





All is the primary engine of innovation over the next decade, potentialized by the integration of emerging technologies

Artificial Intelligence

Augmenting human capabilities



Quantum Compute

Incomparable computing capacity



Devices

Smartphones evolving to natural language and multimodality to be more 'human"



Security

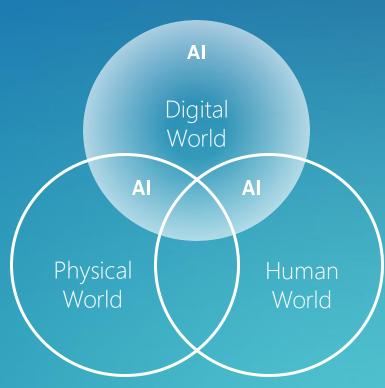
Need for cyber security and privacy increases exponentially



Merge of worlds

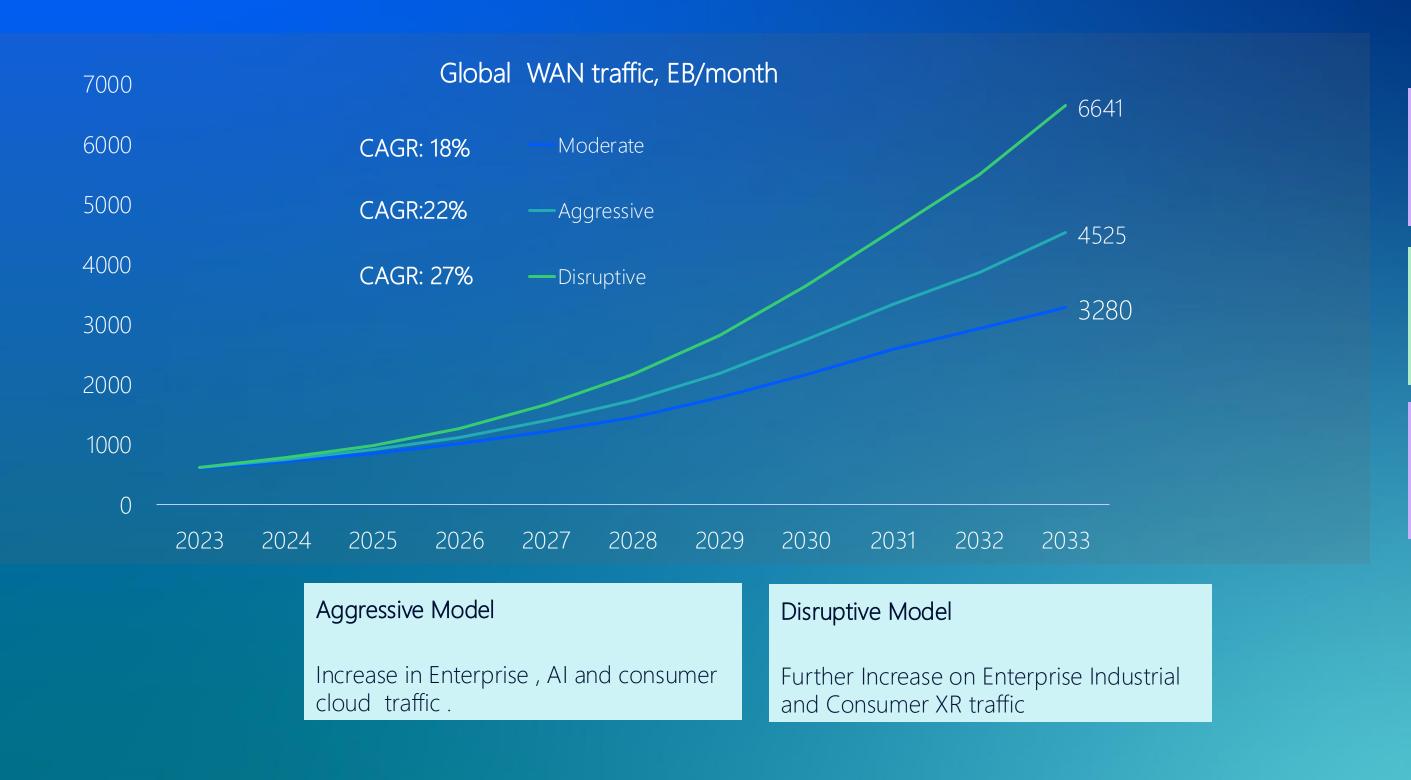
Nokia Bell Labs envision that by By 2030+, technology expanding human possibilities:

- Connection of human, physical, and digital worlds
- Digital convergence boosts digital world's potential
- Transformation across society and business





The combination of new services, device expansion and surge in Alusage are fueling unpreceded data traffic growth



Global traffic

will grow at a CAGR of 18% to 27%

Global consumer traffic CAGR of 18%-25%

Enterprise WAN traffic CAGR of 23%-36%



The AI Wave impact in data centers

Global DC Power Usage

2023

55GW

Source: McKinsey Oct 2024

Global DC Bandwidth Requirements

2023

771 EB/Month



The AI Wave impact in data centers

Global DC Power Usage

2030

22% CAGR 220GW

2023

55GW

Source: McKinsey Oct 2024

Global DC Bandwidth Requirements

2030

22% CAGR 2,190 EB/Month

2023

771 EB/Month



We need to keep up, for the world to go forward Our solutions are designed and ready to cope with the new demands



Al-driven autonomy

Built-in Al

- ▶ Proactive insight
- ▶ Intent-based control
- ▶ Path to L4+ autonomy



Automation at scale

A unified model

- Driving full lifecycle automation
- Simplifying operations in all domains (RAN, IP, Fixed, Optics, Core, Transport)



Secure by design

Telecom-specialized defenses and real-time assurance

- ▶ Resilience
- ▶ Compliance
- ▶ Future ready



EB (Exabyte) Era

- ▶ Datacenter for IA training
- Datacenter for inference
- ▶ Edge Computing



We need to keep up, for the world to go forward Our solutions are designed and ready to cope with the new demands



Networks as platforms for monetization to enhance and drive our customer's competitive differentiation

- Network as a Code-Open APIs
- Converge Charging ecom-specialized
- Network slicing
- Private Networks
- Autonomous Network Fabric



Continuously improving product energy efficiency, driving circularity to reduce waste, sustainable operations and supply chain, providing critical networks for life







An unrivalled track record of driving innovation that changes the way we live, work and communicate



Transistors



Information Theory



Solar cells



Laser/fiber optics



Satellite communications



Charge-coupled devices



Unix/C/C++



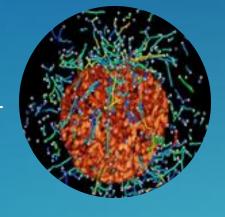
Coherent optics



Cellular communications



Neural networks



Super-resolution microscopy



Multi-antenna systems



Worldwide recognition for revolutionary discoveries

Nobel Prizes







US National Medals of Technology & Innovation









Nokia Bell Labs The past guiding the future













TIME and Statista's World's Most Sustainable Companies List

We're truly honored to be named one of the World's Most Sustainable Companies in 2025, ranking #37.

This recognition is a testament to our strategic commitment to sustainability, fully aligned with our corporate strategy to develop ESG into a competitive advantage.







We create technology that helps the world act together

At Nokia, our mission goes beyond technology: we create value for customers, partners, and end users.

Scalable, secure, and sustainable networks. Innovative business solutions and new ways to monetize networks. Smarter digital experiences.

Together, we are shaping the future of connectivity and telecommunications in Brazil.

