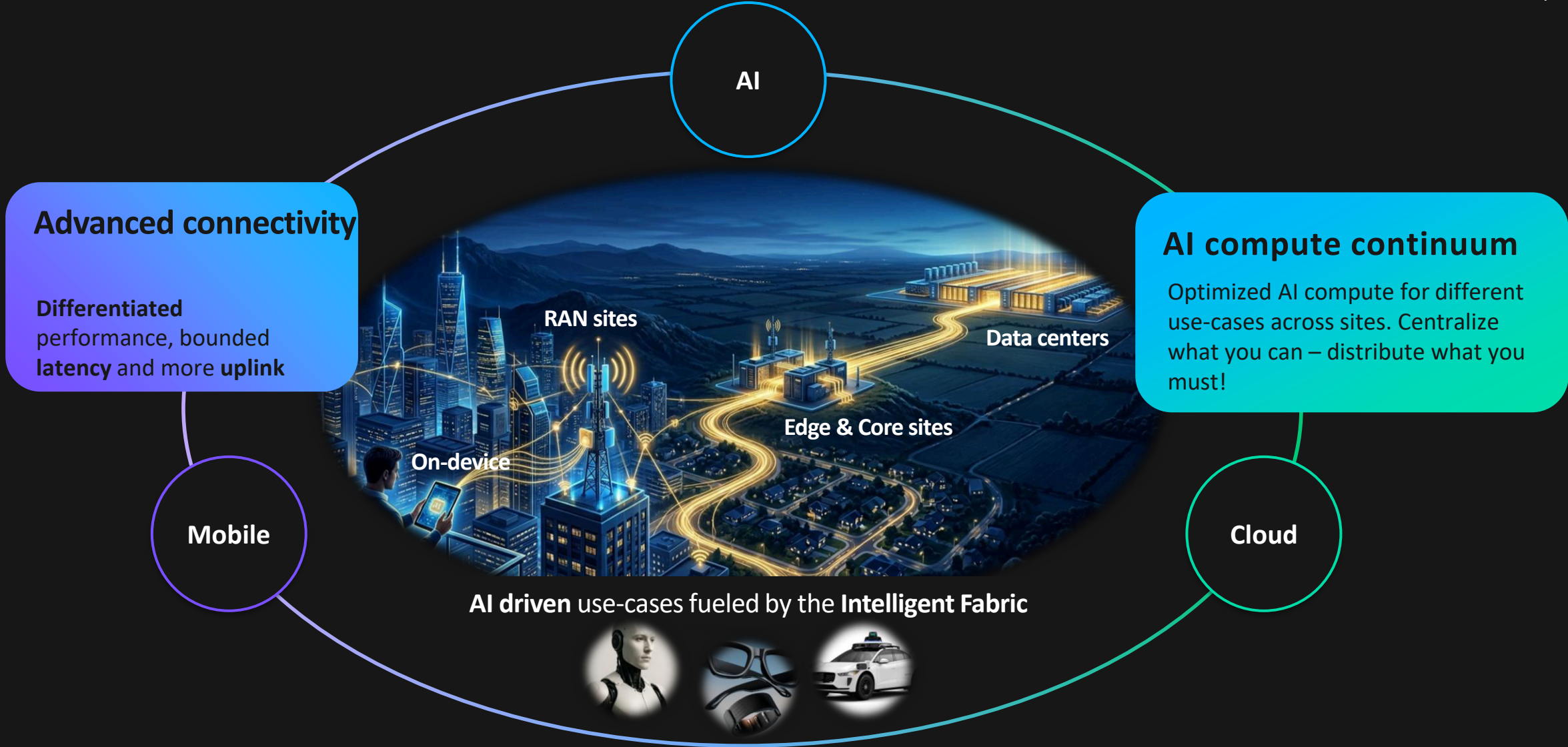


AI-Native Networks: Powering the Autonomous Future

The Intelligent Fabric & Best Networks for AI



Networks for AI: Emergence of AI-native Use Cases

Intelligent fabric is emerging underpinned by networks, cloud, AI

Immersive experience

Smartphone



(Gen)-AI enabled hyper-personalized content

AI/AR devices



Uplink-heavy compute offload for small form factor devices

Agents to agents (A2A)

AI agents



Emergence of uplink-heavy video/multimodal LLMs and AI agents / assistants.

Humanoids



AI autonomous droids with heavy uplink

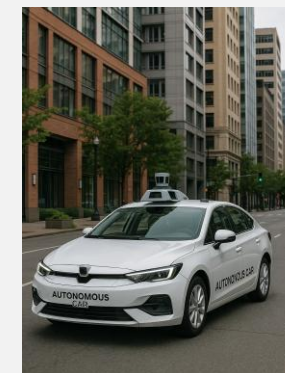
Physical AI

Drone



Drones utilize sensing for beyond-visual-line-of-sight (BVLOS)

AVs



Autonomous vehicles requires high volume, low latency, and data management

Networks for AI, AI for Networks

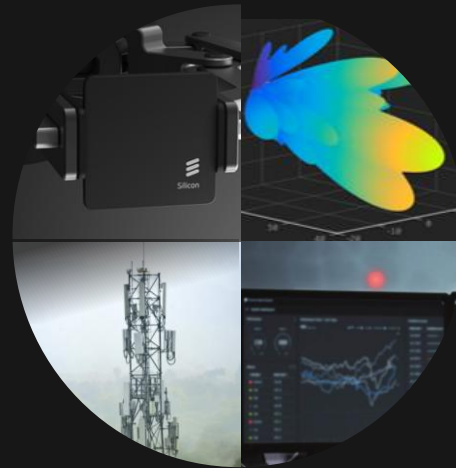
Built on strong foundations

Networks for AI



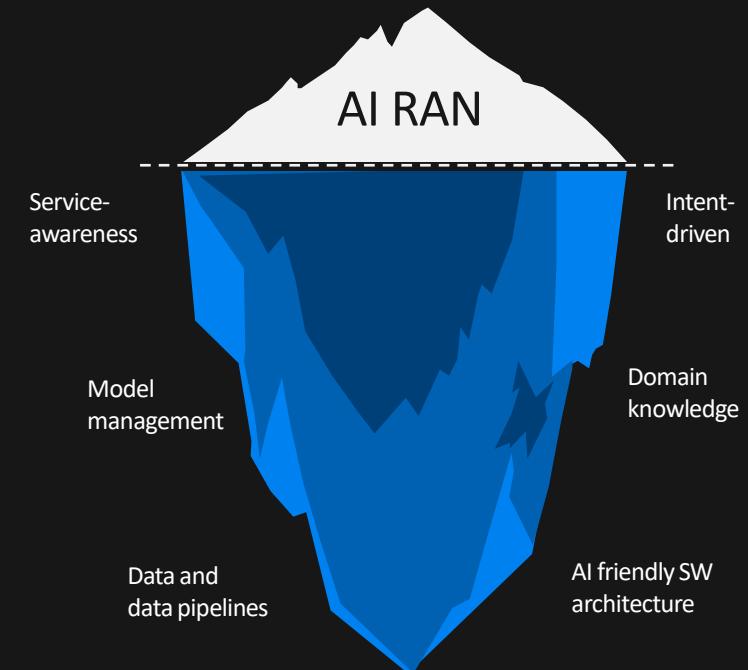
Reliable uplink speeds
Differentiated services
Trustworthy

AI for Networks



Highest spectral efficiency
Enable new services & automation
Enhanced security

Foundations



Network and Service evolution require paradigm shift in both business and operations

New business paradigm

New operations paradigm

Performance-based
business models

Network slices

Network APIs

Differentiated
connectivity

Autonomous
networks

Business agility

AI-powered E2E intent-
driven

Self-optimized
and healing

High-performing programmable networks



Dynamic Slicing



Automation



Secure

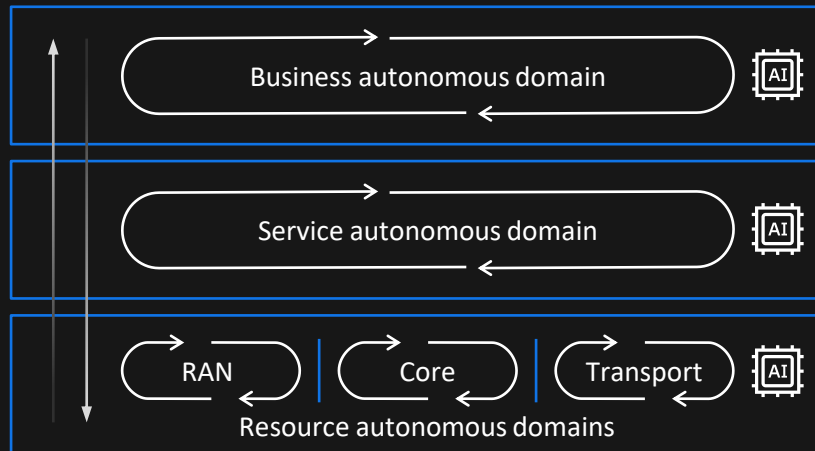


Open

Intent-driven and AI-powered network autonomy

Intents

expression and fulfillment

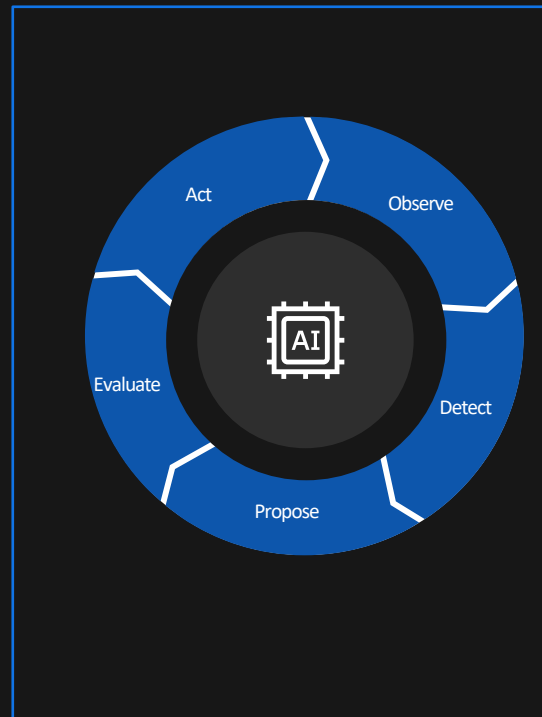


Openness

Open APIs and standard interfaces within and between autonomous domains

AI agents

to close the loops

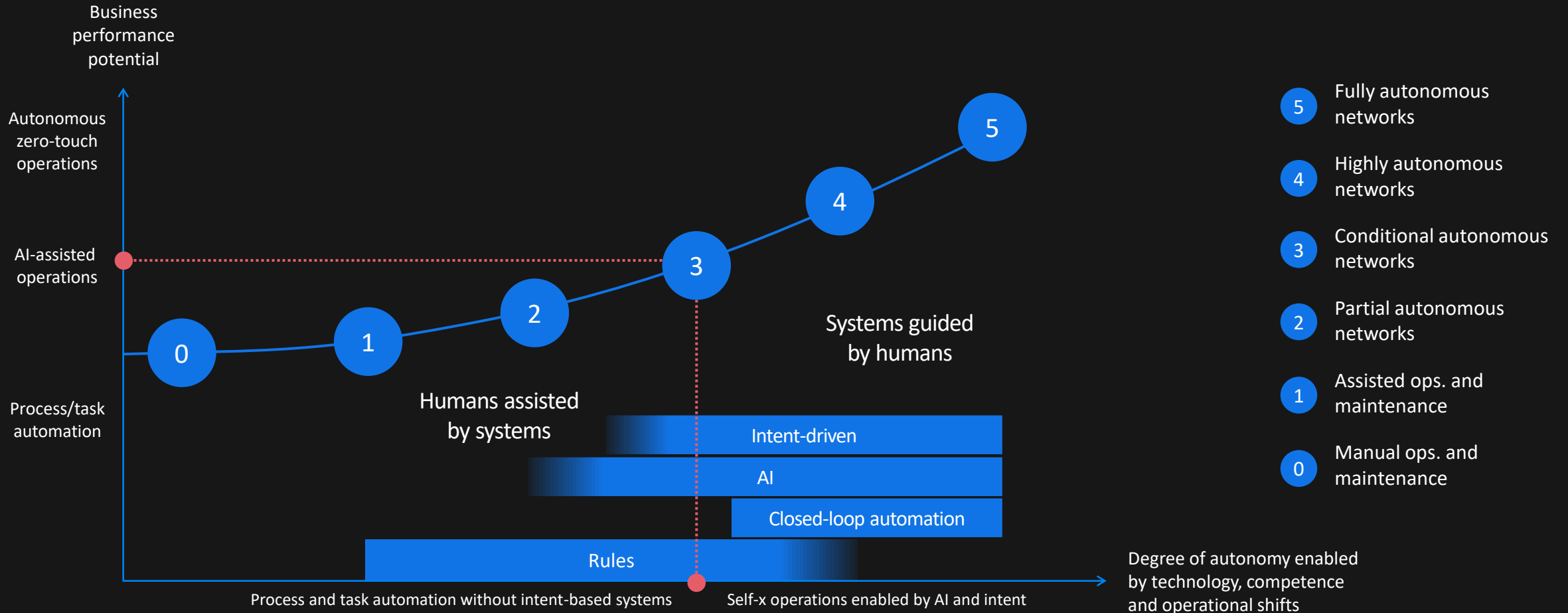


**Business
and service agility**

**Network performance
and resilience**

**Simplification
and efficiency**

AI and Intent Pivotal for Operational Paradigm Shift Toward Autonomy



The path to 6G

AI-native 6G

AI-powered 5G

5G

Scale use cases & sectors:
FWA, enterprise & MCN

Differentiated connectivity via
slicing

Network API's

5G SA, Mid-band M-MIMO,
cloud operating model

Autonomous Networks –
(Level 4 for domains)

Best network for AI –
Uplink, dynamic slicing

AI integrated
for performance, energy &
operations optimization

Enhanced experience 5GA
(Time-sensitive/mission critical,
low cost/power devices
(Redcap), precise positioning)

Best AI/AR, robotics NW –
AI inference optimization

Full coverage via NR NTN
integration

Sensing
(Standalone, drone monitoring)

Full Autonomy

Breakthrough performance
& resilience via new spectrum,
UL, scalable 6G RAT

Tailored performance at scale
(AI, AR, physical AI)

Integrated sensing
(ISAC)

Industry & architecture evolution with likeminded partners



150 years
of reaching
new horizons