Ericsson Telecom AI

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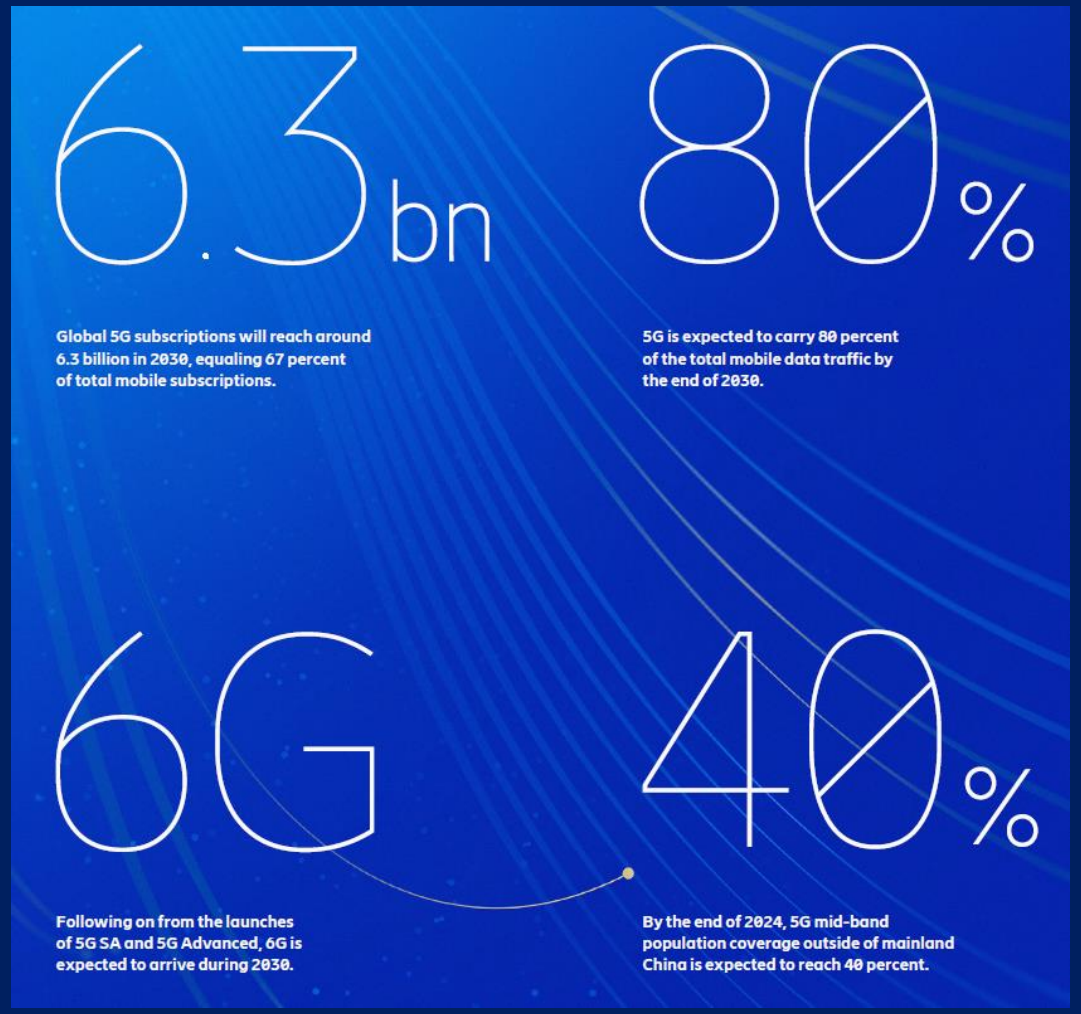
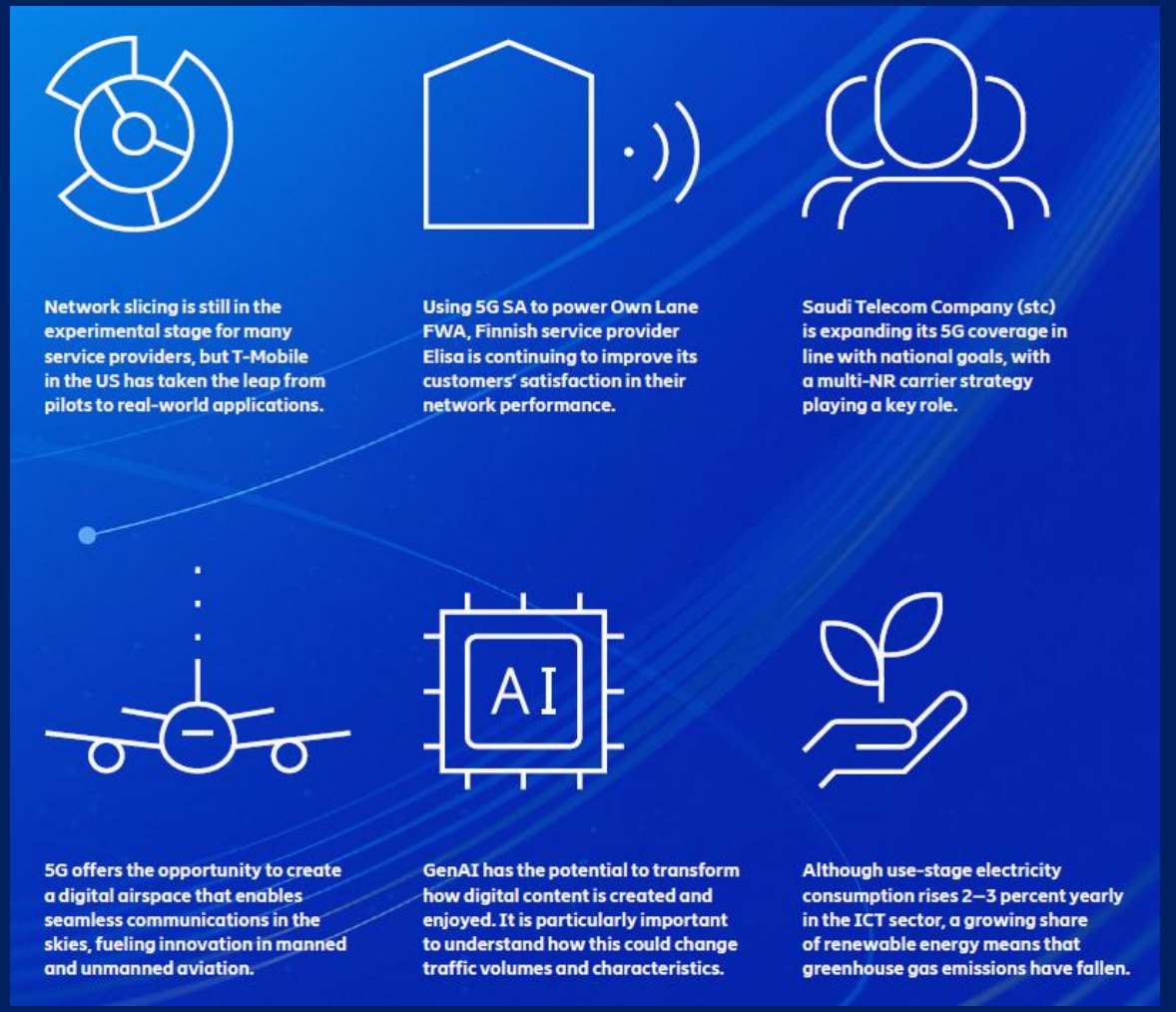
Key Trends In Mobile Networks

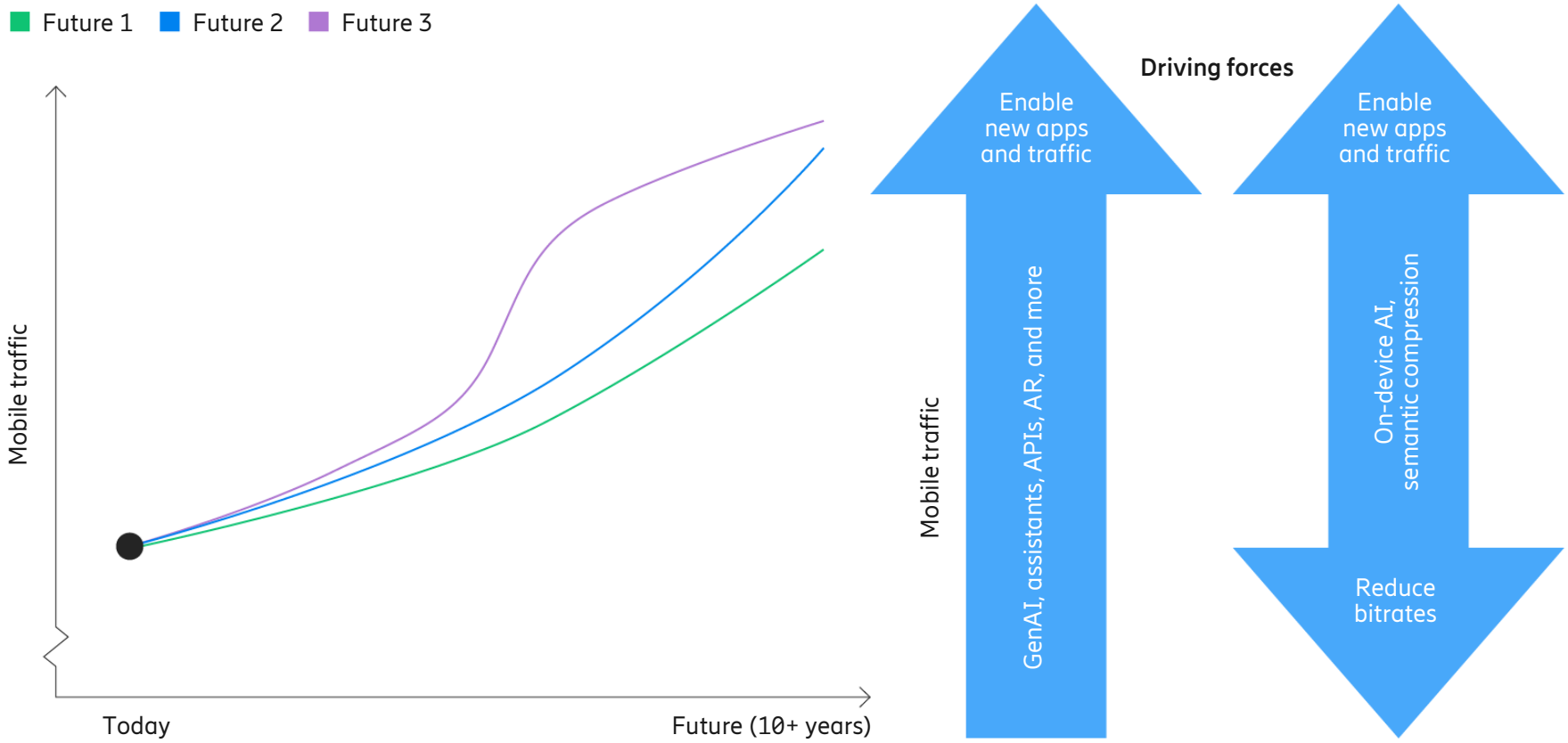
source: Ericsson Mobility Report Nov. 2024





Impact of Gen AI on mobile network traffic

A conceptual illustration of different mobile traffic growth impacts due to GenAI



Future 1: Adoption of GenAI at scale.

Future 2: Accelerated consumer uptake of GenAI.

Future 3: GenAI consumer uptake will explode – Industry adopts efficient video compression technologies, including potential introduction of semantic compression

AI is set to have high impact across mobile networks

Ericsson is accelerating AI value with field-proven use cases

18%

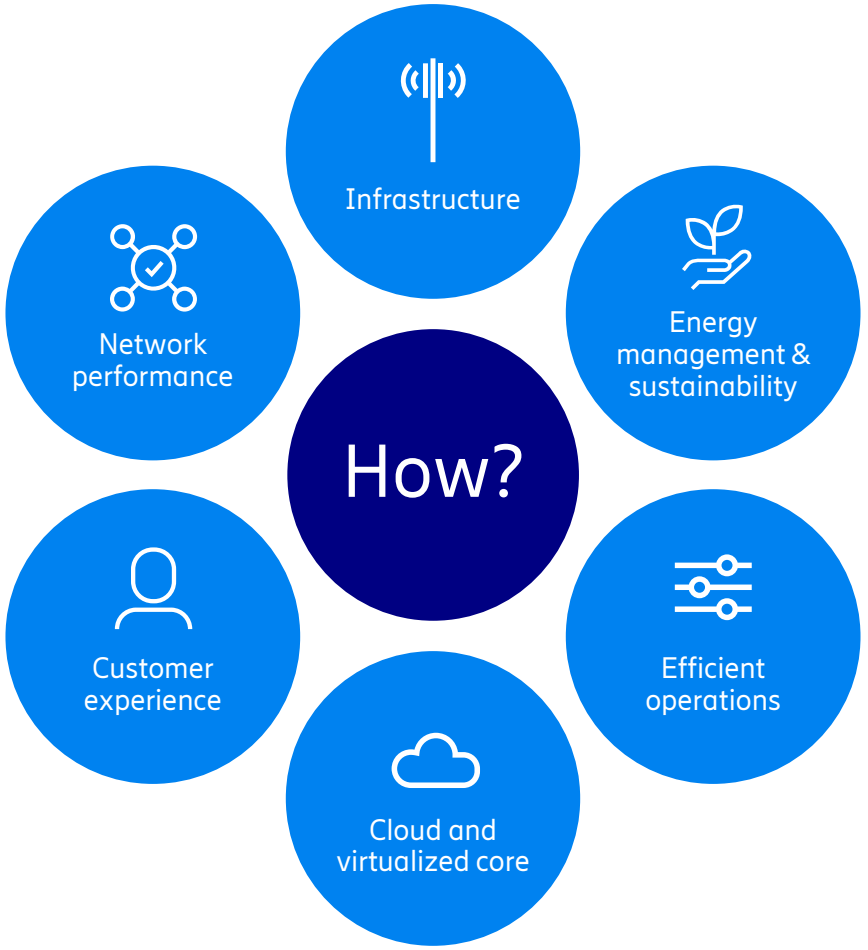
Network load redistribution – more efficient use of resources **Self-Organizing Network**

15 min

vs 1 week to automatically classify 100 000 cells with **Cell Issue Classifier**

80%

Reduced signaling with **machine learning assisted paging**



25%

Better 5G coverage **with 5G-aware traffic management**

14%

Energy savings with **Augmented MIMO sleep**

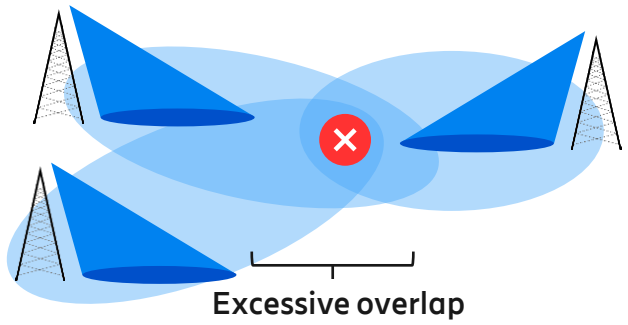
>95%

incidents prevented with **RAN KPI degradation prediction**

AI in Control

Energy saving without impacting experience

Radio network baseline

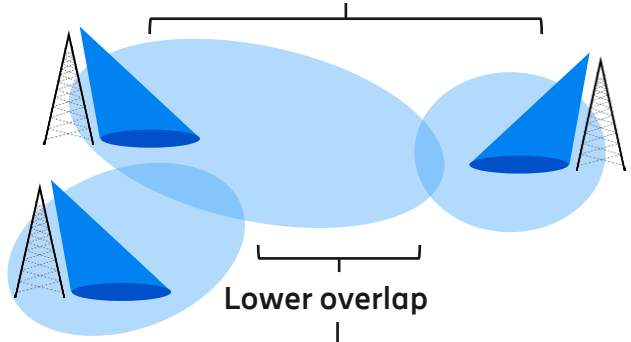


Excessive overlap

Opportunity to save energy and improve customer experience

Use-case 1: Power optimization

Same coverage



Lower overlap

↓

Lower interference

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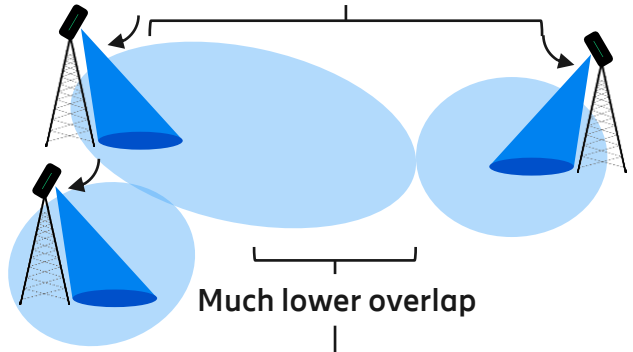
Unknown customer experience

Use-case 1: Power optimization + Use-case 2: Antenna tilt optimization

Compensated coverage



Much lower overlap

↓

Much lower interference

↓

Optimal customer experience and power transmission

AI can solve complex optimization problems such as balancing intent to increase bandwidth and coverage while reducing power consumption. AI is orchestrating a set of simultaneous AI driven actions.

AI in Action

Use cases and customer cases

Video 1: “5G Saving Lives”

AI in Action

Use cases and customer cases

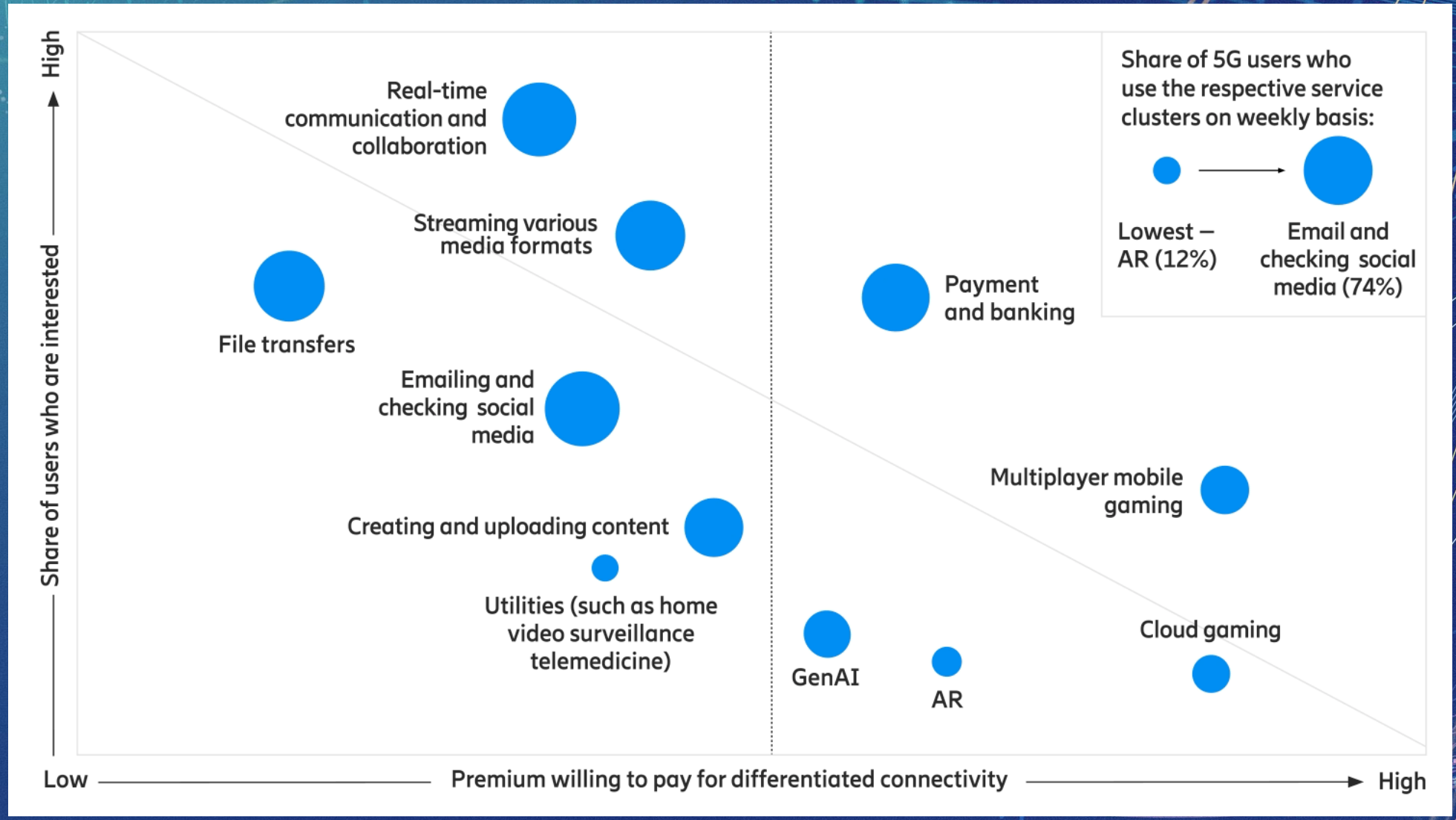
Video 2: “AI For High Resiliency”

AI in Action

Use cases and customer cases

Video 3: “AI For Frauds Detection”

35 percent of 5G users today show a growing appetite for elevated connectivity beyond standard 5G performance



https://www.ericsson.com/en/ai