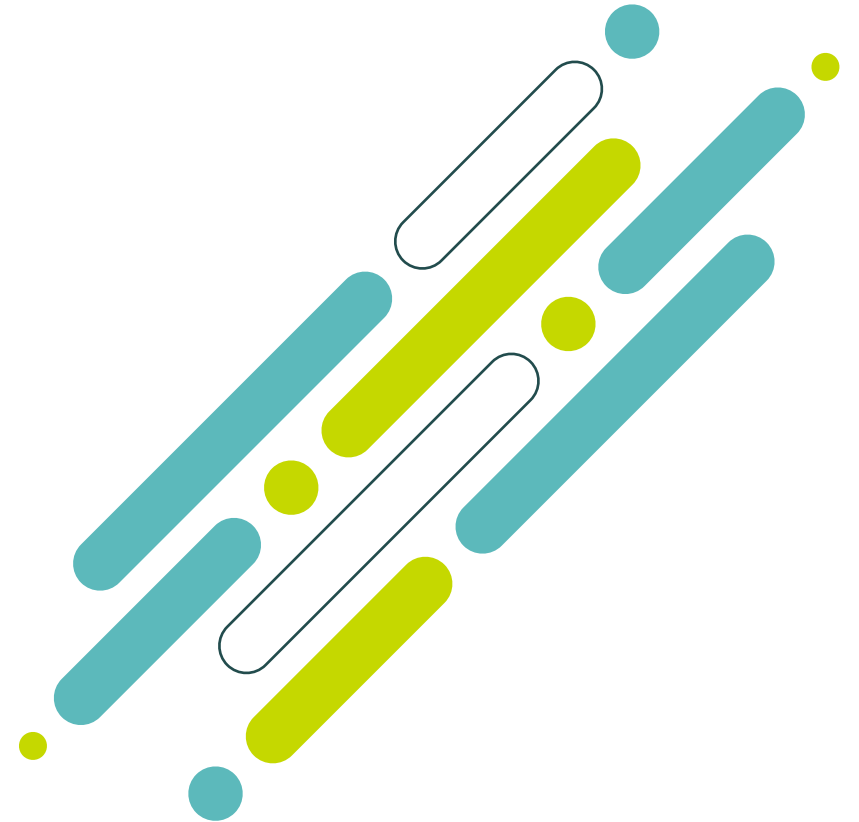




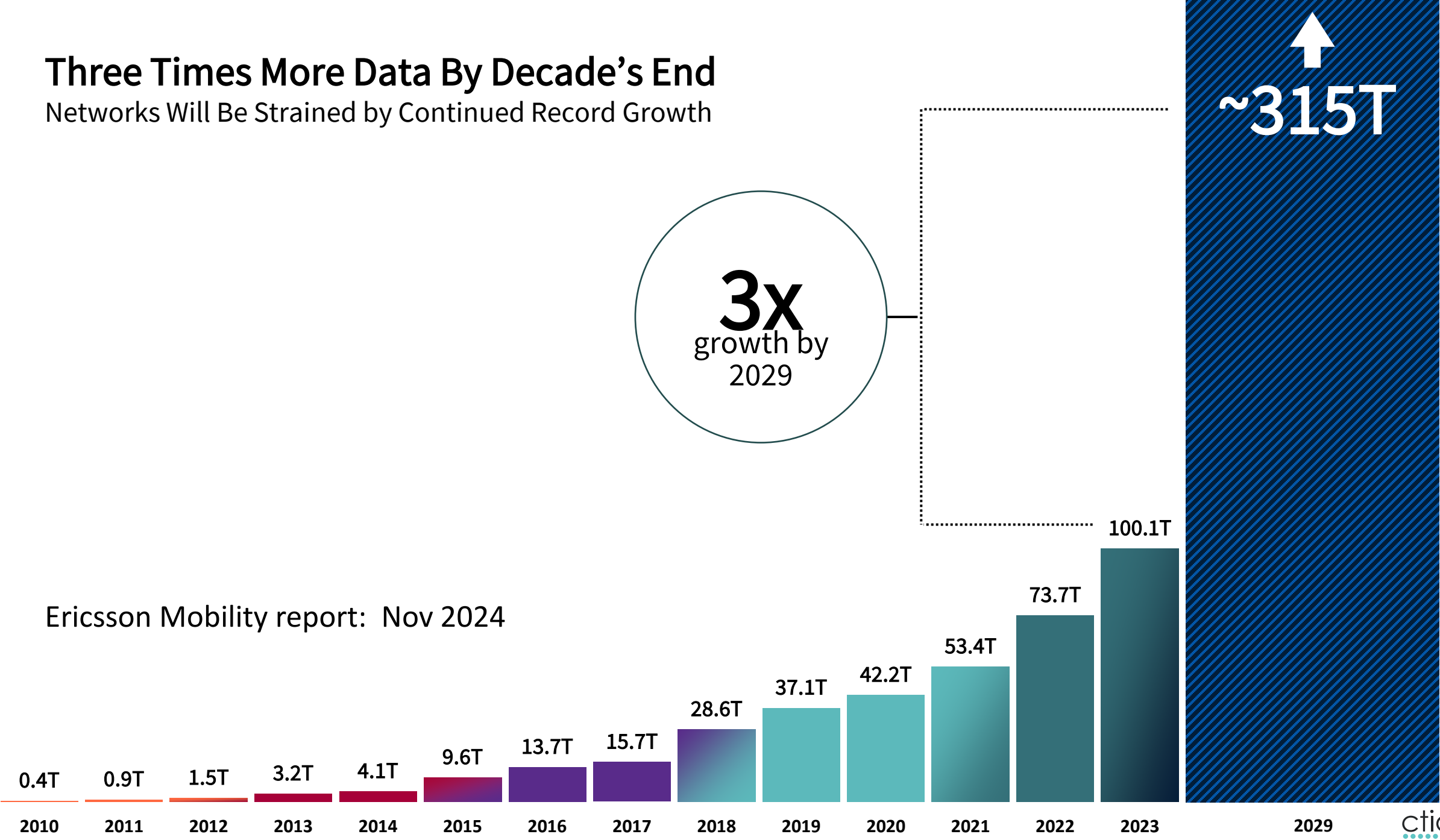
Wireless Usage Growth

Tom Sawanobori, SVP and CTO



Three Times More Data By Decade's End

Networks Will Be Strained by Continued Record Growth

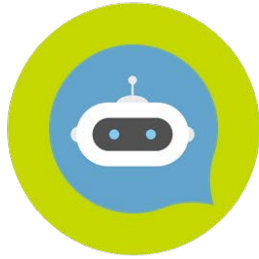


AI Will Further Strain Networks

The Rise of AI Puts Greater Pressure on Future Capacity Needs

“

In the infrastructure layer that is required for AI, success tends to be forgotten.” Cellular networks may be the “next AI bottleneck” as “the absence of high-speed, low latency connectivity means that certain use cases are not possible.”
- Margherita Della Valle, CEO, Vodafone



3.2x

Amount AI traffic is projected to grow compared to non-AI traffic over the next decade



2028-30

Time period by which experts suggests wireless would be “vulnerable” to popular Gen-AI applications



1/3

Future AI wireless uplink traffic will not be met without more spectrum

Ericsson, Nokia predictions

Average Cell Capacity Can't Keep Up With Demand Without More Spectrum

● Peak cell demand ● Cell site capacity

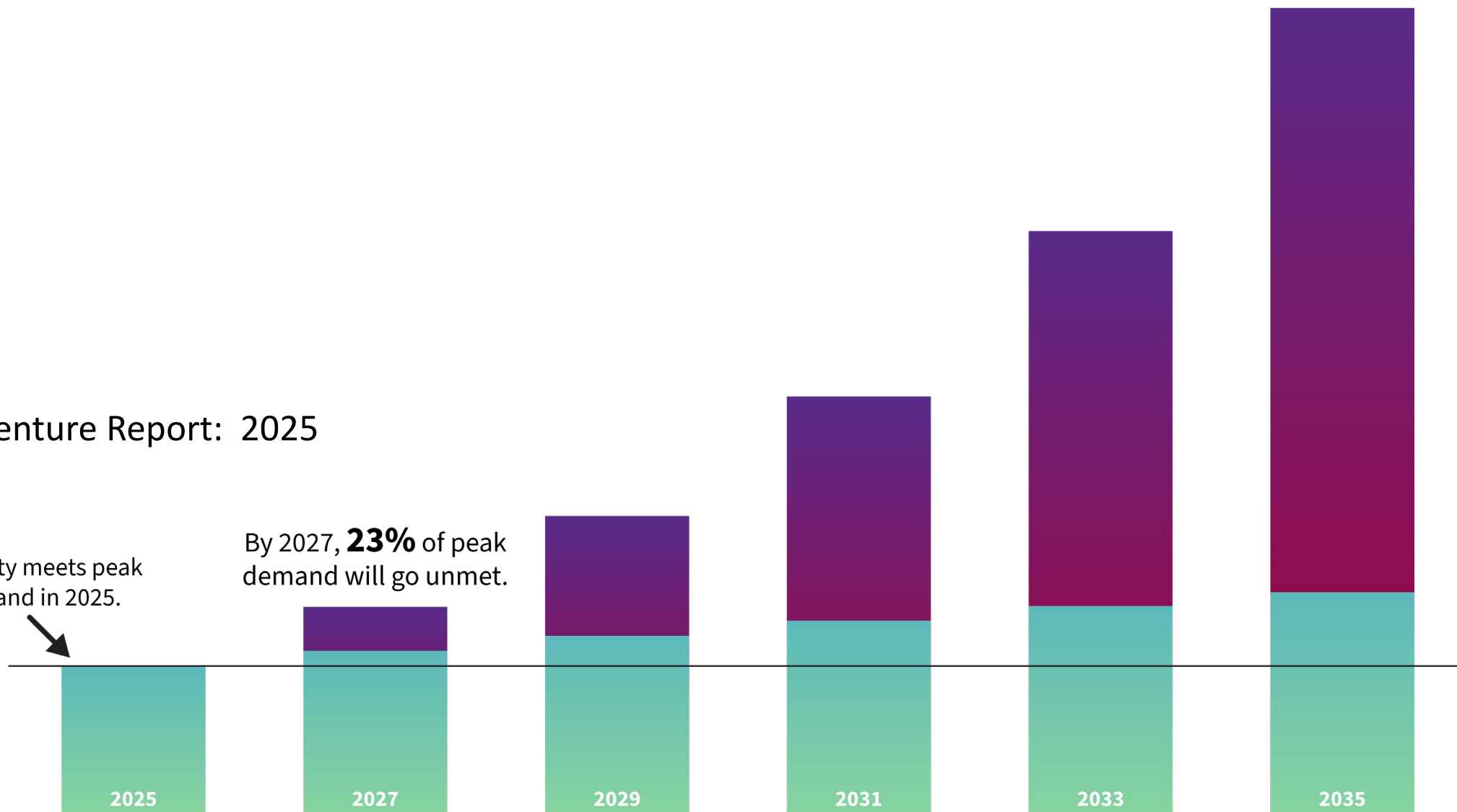
By 2035, **73%** of peak demand will go unmet.

Accenture Report: 2025

Capacity meets peak demand in 2025.



By 2027, **23%** of peak demand will go unmet.



Wireless Industry Cannot Meet Demand Without New Spectrum

The U.S. Is Only 2 Years Away From Material Spectrum Deficit in Some Cities

To Meet **3x** Growth in Demand, Wireless Industry Will:



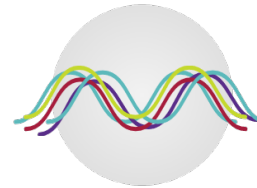
Invest More Money

Wireless invests in the U.S. each and every year—an expected **\$80-120B** over the next 4 years.



Build More Towers

Wireless continually densifies networks to help meet localized demand. Over **40%** more cell sites deployed in the last decade.



Use More Efficient Tech

Wireless is **42x** more efficient with spectrum than it was a decade ago and will keep getting more efficient with 5G.

**This will not be sufficient –
more spectrum is needed**