



Promises, Hypes and Economics

Have asked chatGPT

Dependency between Market and Standardisation



Market → Standardisation

- Innovation demand (speed, latency, IoT) drives new standards.
- Economic viability decides which standards gain traction.
- Regional priorities (Europe, US, Asia) influence global direction.

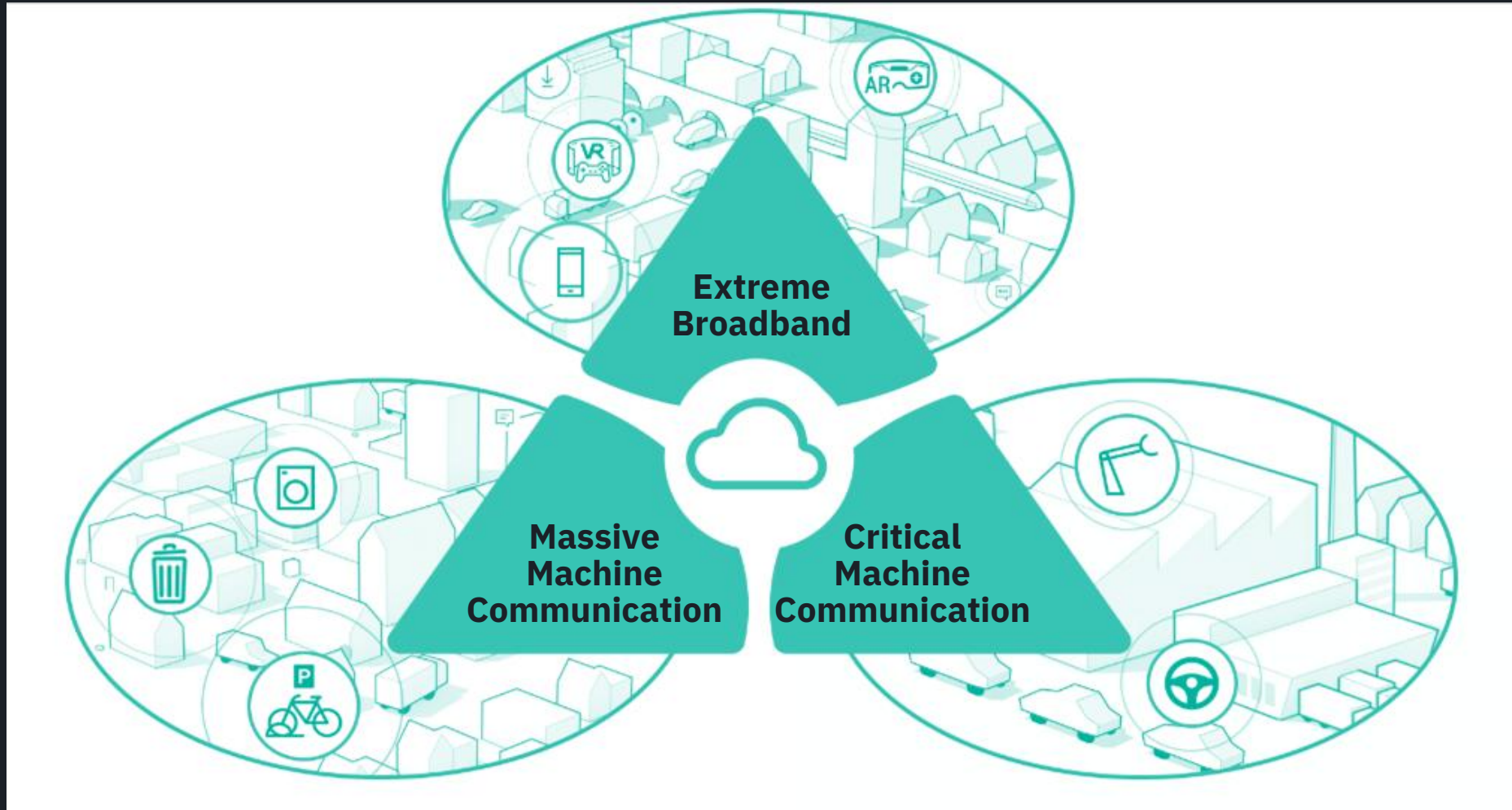
Standardisation → Market

- Ensures interoperability and global scale.
- Reduces risk, enabling vendor/operator investment.
- Timing of standards can open or close business opportunities (e.g., LTE vs. WiMAX).

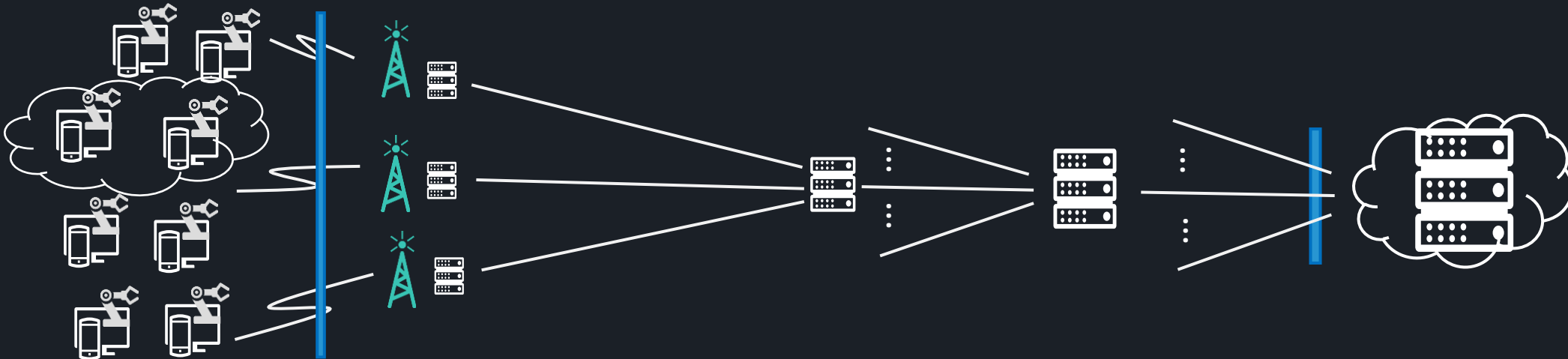
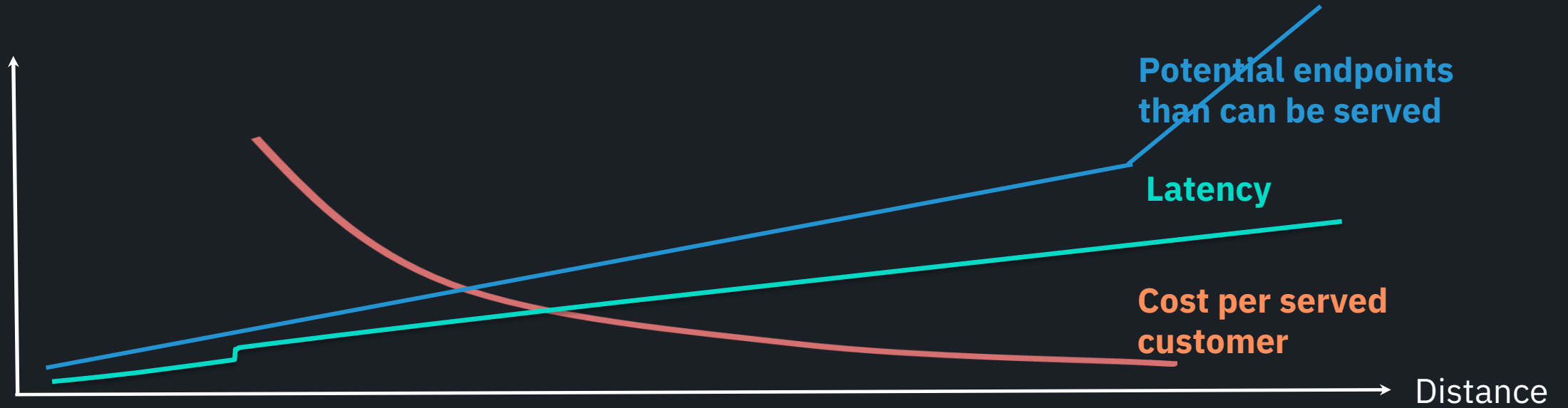
Co-Evolution

- Feedback loop: market needs → standardisation → market growth.
- Large players shape standards to reinforce market positions.
- Adoption validates standards (e.g., LTE success, WiMAX decline).

Do you remember ? 5G general application areas



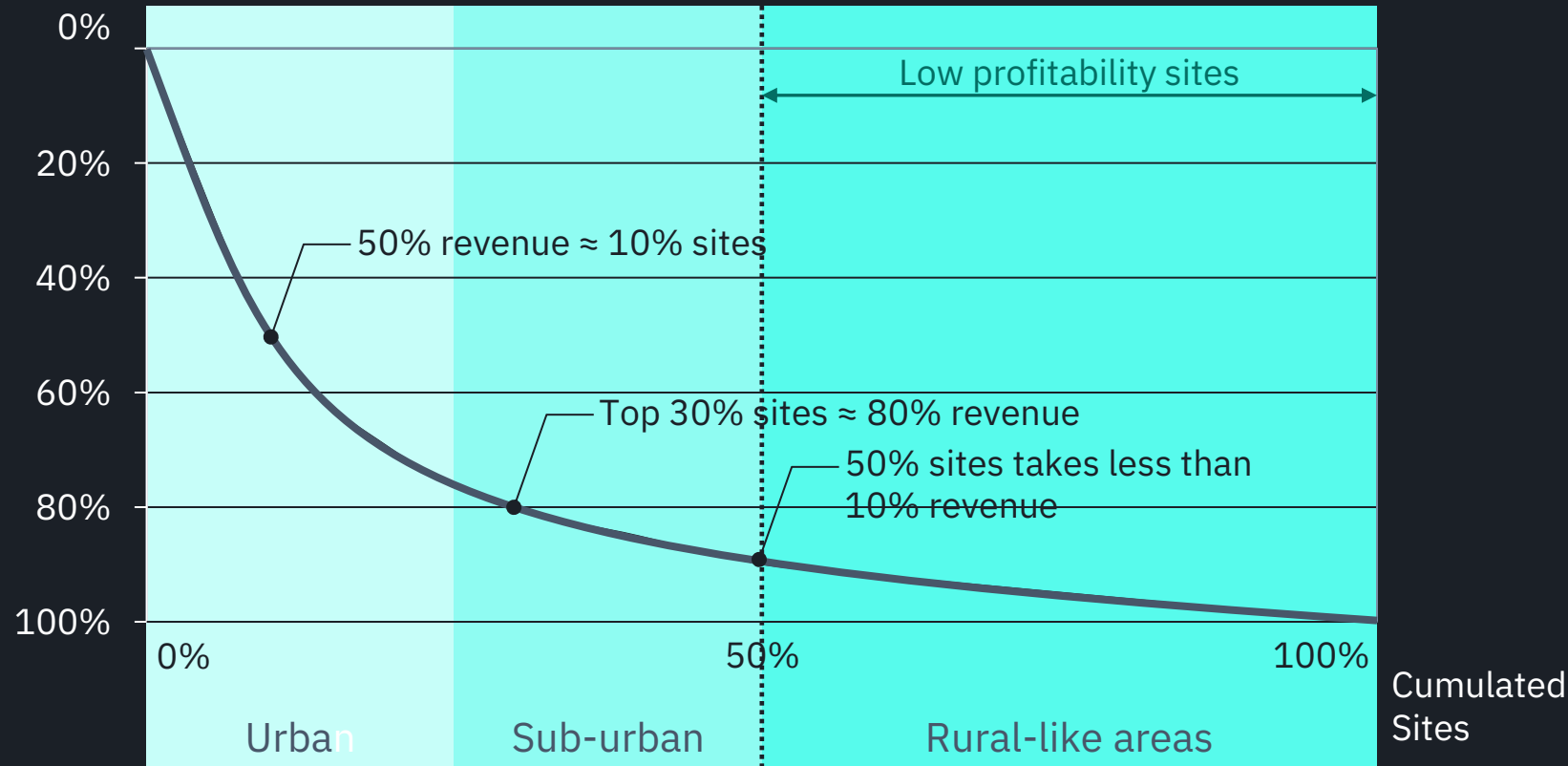
Telecommunication and Cloud is about statistical resource sharing



Also keep in mind some basics of cellular networks
Might not really change in future

Cumulated Revenue (Traffic)

Illustration



- The ugly tail ...
- The low profitability areas
- Costly rural areas

How would you illuminate your living room ?

Outdoor—Wide Area



Indoor—Short Range

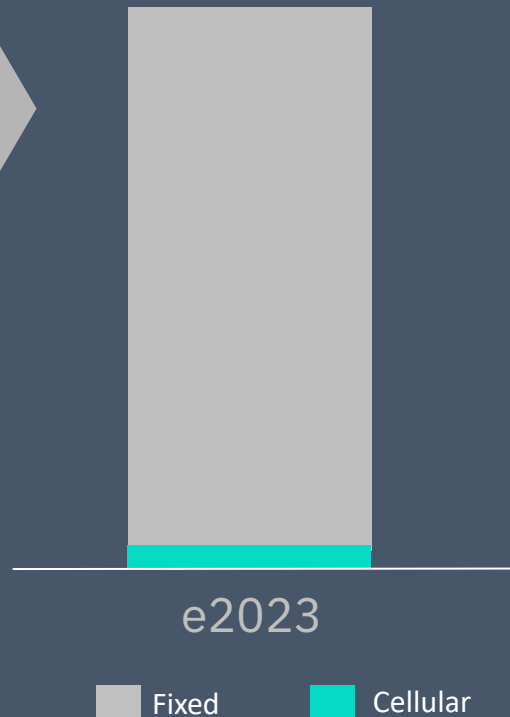


Source : Is there a thing called 5G ? Jens Zander
Scientific Director, Wireless@KTH KTH – The Royal Institute of Technology,
Stockholm, Sweden

Traffic Demand and consumption in cellular platform

Germany

Fixed network peak traffic is and will be significant higher compared to cellular



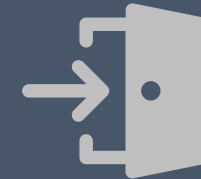
^{NTT}
docomo

: traffic consumption cellular

Indoor dominates

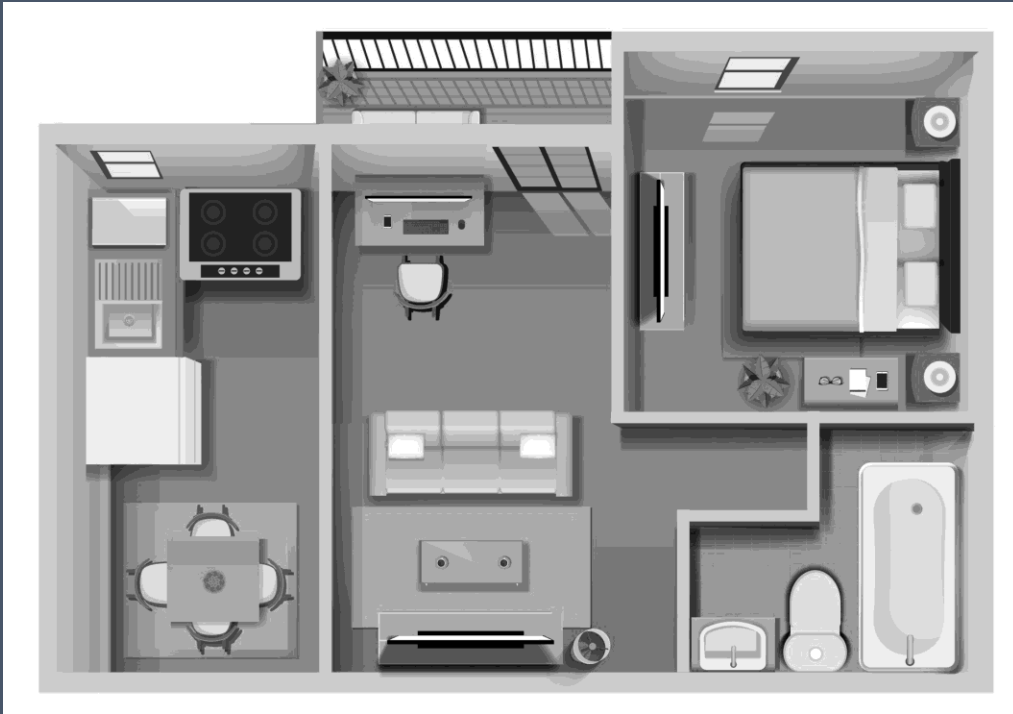
20–30%
outside

70–80%
indoor



Business Roles and Operation

A typical apartment



Different entities and roles

The networks of an apartment in a large apartment building.

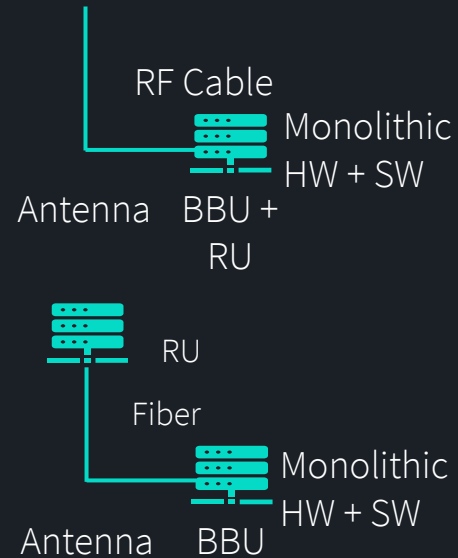
- Broadband Internet access (contract between apartment user and network operator)
- Smart home IoT network integrated into apartment;
 - Integrated in apartment renting contract
 - Owned by apartment owner, operated by a facility service company
 - Facility service company has contract with another operator for basic internet access of building
- Security company operates surveillance cameras in the public space of the building






The promises of 6G



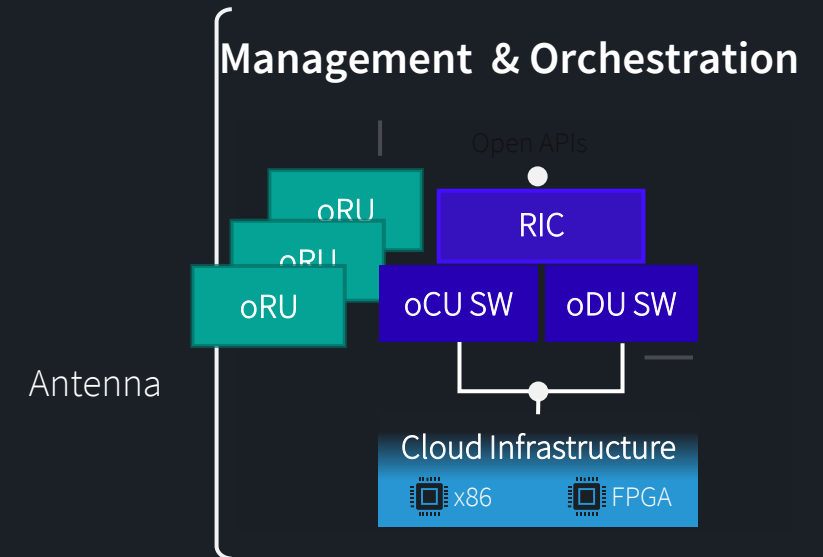
Source: https://vdivde-it.de/sites/default/files/document/6G-Studie_Aller%20vernetzt%20alles%20m%C3%B6glich.pdf

The promise of open RAN

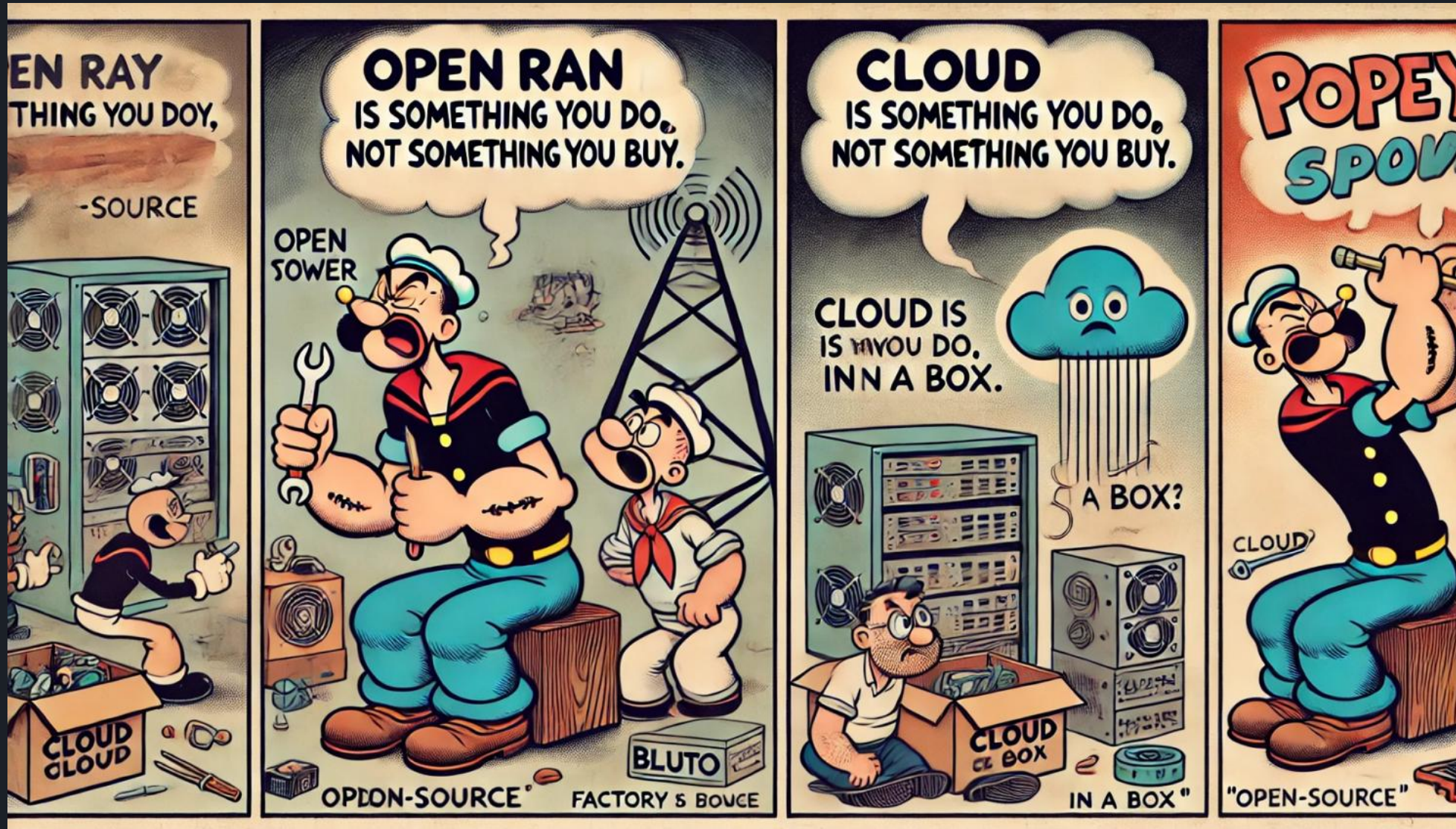


-  **Modular | decomposed**
-  **Cloudified | software-based**
-  **Open APIs & ecosystem**
-  **Automated**
-  **Resilient supply chain**

LEGACY RAN



DISAGGREGATED OPEN RAN

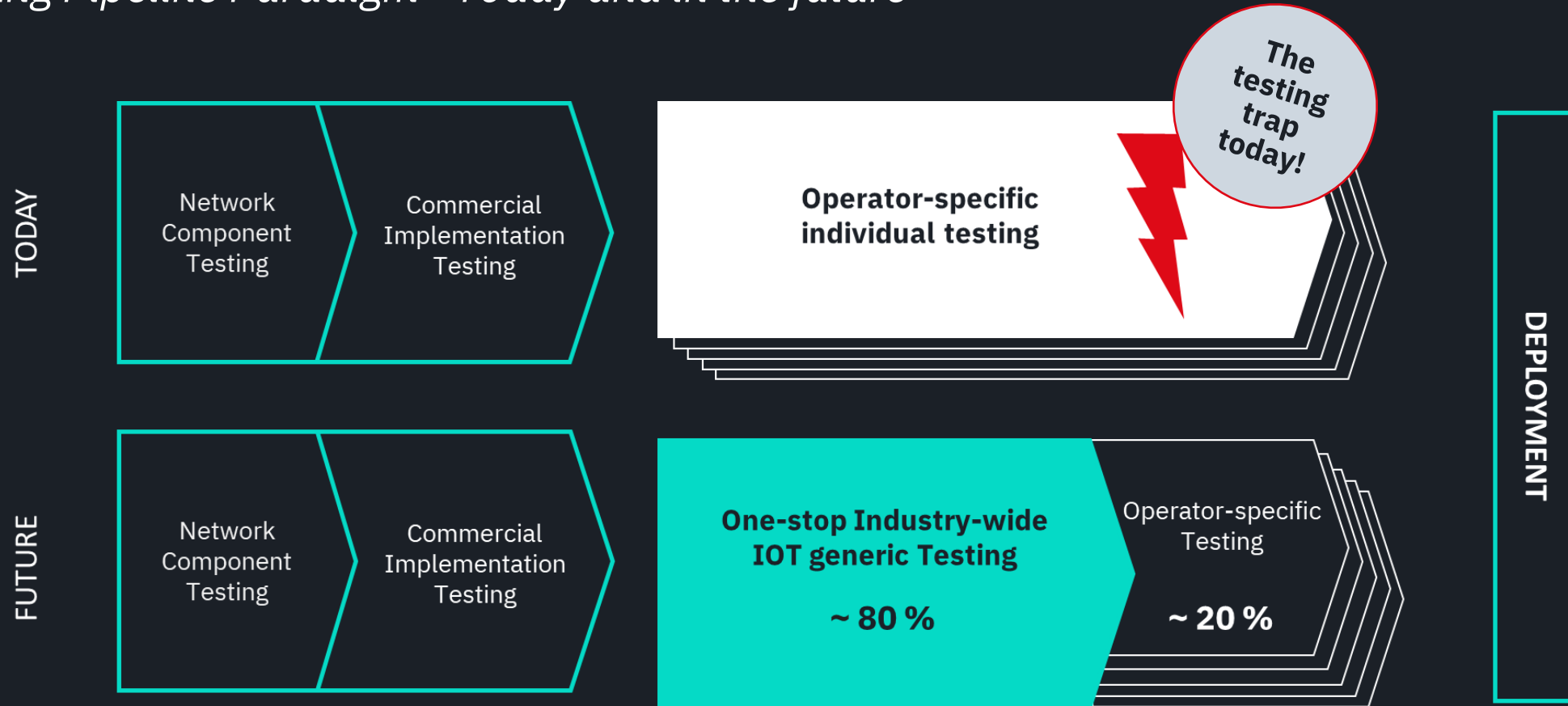


Source: Geoff Hollingworth

<https://www.linkedin.com/pulse/substance-slop-what-focus-mwc-2025-geoff-hollingworth-pex1e/?trackingId=PlkvHtcWQoeBRGtVkDYSXg%3D%3D>

Overall effort reduction for the ecosystem

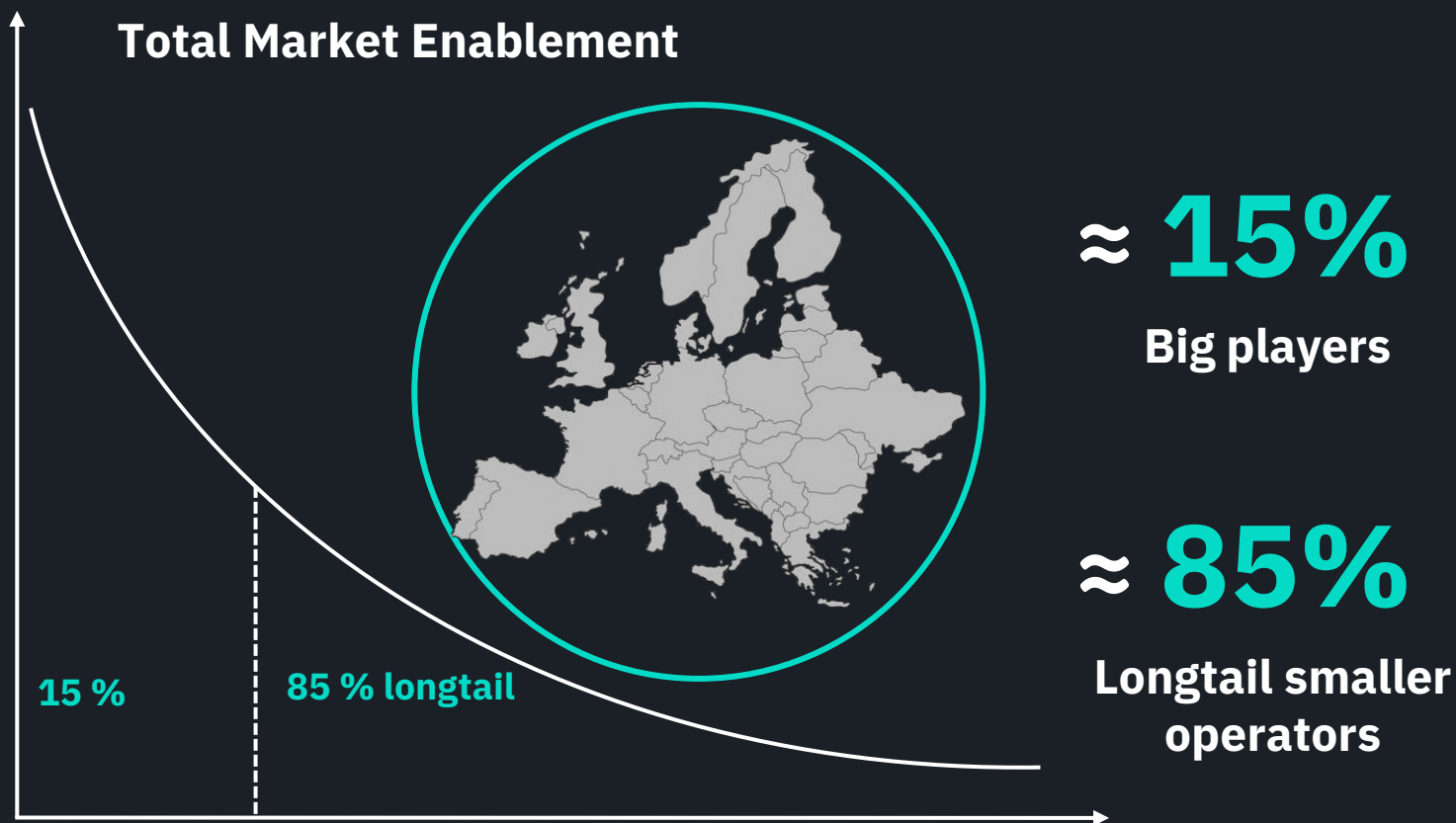
Testing Pipeline Paradigm · Today and in the future



Enables efficient **continous testing and pre-integration** of overlapping requirements

Only the full ecosystem creates the market

we must also address smaller operators to create the volume needed



- Establish reference architectures supporting Tier-1 operators' needs
- Grow market volume by helping smaller operators to use Open RAN
- Give access to i14y Lab insights to foster learning

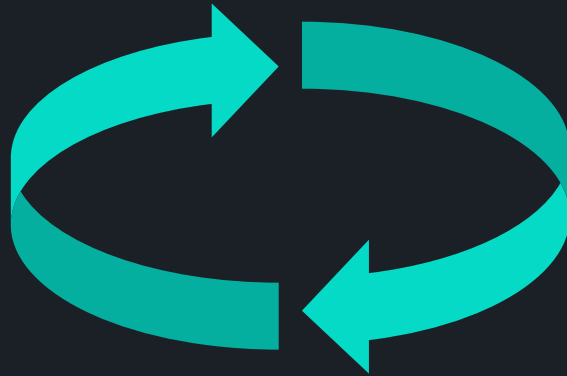
Support evolution of new markets

we must also address new markets to create the volume needed



MNO

- Complex outdoor macro
- Limited variety of vendors
- High volumes



Overlap

- Indoor small cell
- Cloud



Campus /Enterprise

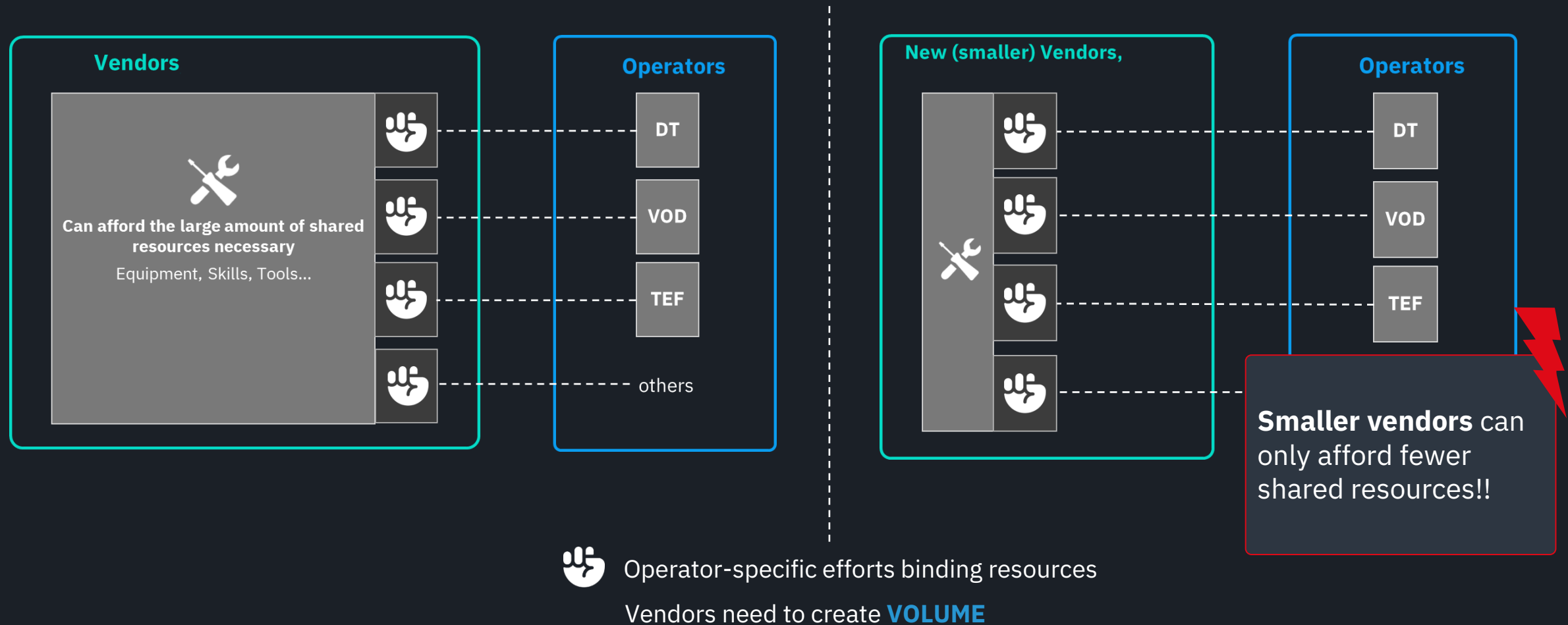
- Heterogeneous structure
- Higher variety of vendors
- Small to medium volumes



- Establish reference architectures supporting Campus needs
- Grow market volume by helping Campus providers to use Open RAN
- Give access to i14y Lab insights to foster learning

Why the current traditional model is problematic

Having operators' needs catered creates high effort and ties up resources!





Thank you

Stay in touch with us



www.i14y-lab.com



LinkedIn



Fact Sheet