

State of Open Source Networking & Edge

*5G+Cloud+AI+Edge+IOT
& Implications on Vertical Industries*

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The Linux Foundation

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

 **LF** EDGE

- 1 Open Networking, Edge & IOT are critical in the new normal across vertical industries
- 2 Open Compliance, Standards + OSS Harmonization & Use Case driven deployments gaining traction
- 3 Edge is the next Cloud

Open Industries

“Open-Sourcification”

Telecom at the forefront

+

Automotive

+

Motion Pictures

+

Fintech

+

Public Health

+

Energy

Software-defined vertical industries: transformation through open source

How open collaboration enables user-centered innovation, achieving faster development cycles, time to market, and increased interoperability and cost savings.

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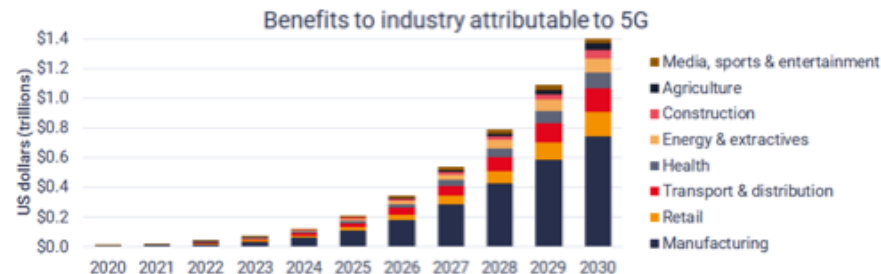
5G and Edge Critical in the Next Battle, a new normal!

Edge is 4X the Size* of Cloud Market !

“As businesses and governments establish their own new normal, **5G and Edge computing** will be necessary to deliver the automation, performance and cognitive insight required by many industries—including manufacturing, healthcare, energy and utilities, among others. Telecom operators will need to embrace open ecosystems to externalize innovation and accelerate new services.”



<http://www.chetansharma.com/publications/edge-internet-economy/>



The Diverse Potential of VR & AR Applications

Predicted market size of VR/AR software for different use cases in 2025*



How VR and AR will be
used in 2025

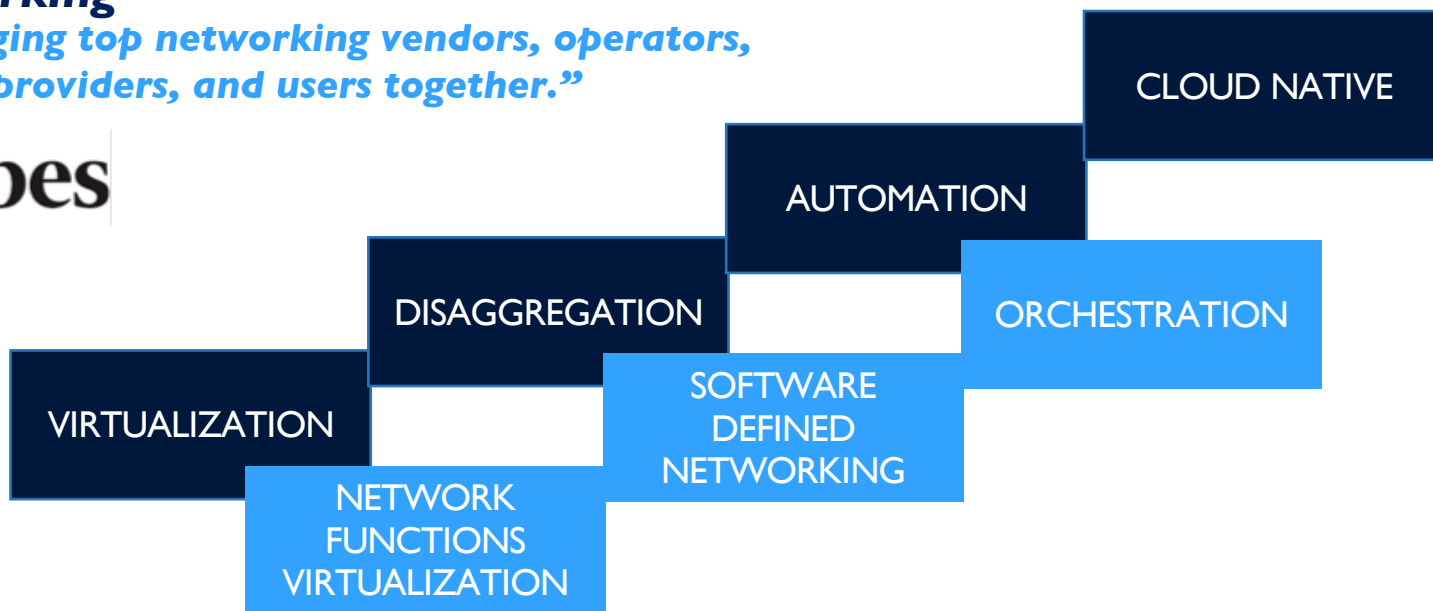
Image: Statista

Technology Disruption, enabled by Open Source

The LF is Changing the Fabric of Networking

“...bringing top networking vendors, operators, service providers, and users together.”

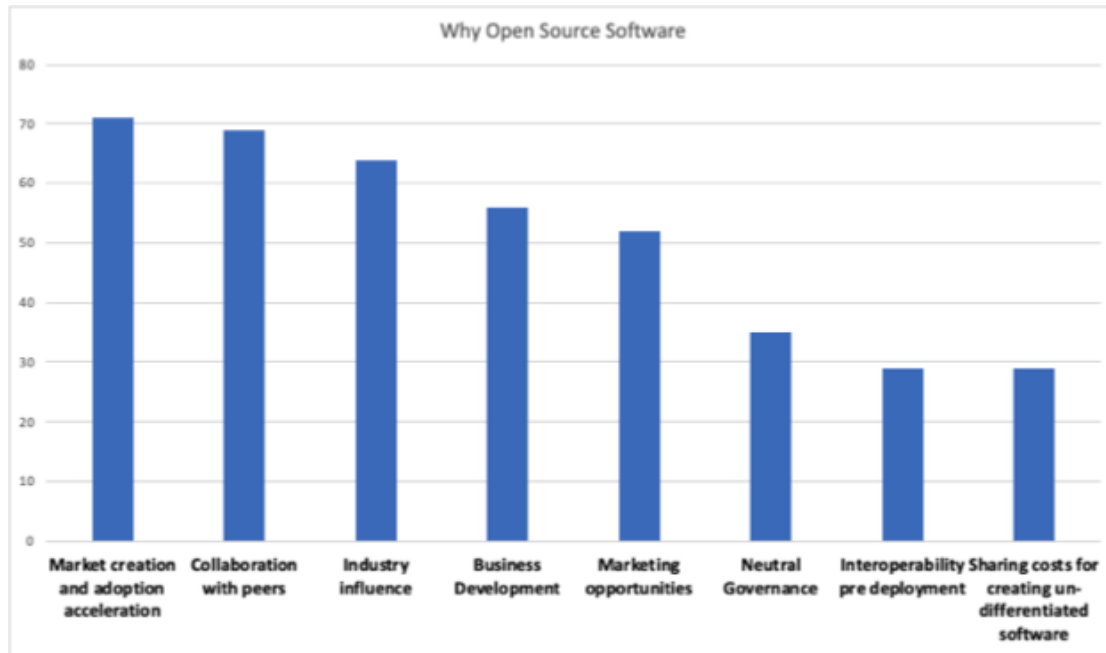
Forbes



Why Open

Networking & Edge

**“From Cost Savings to
Market Adoption”**



Source: LF Edge Community Survey, Sept 2020

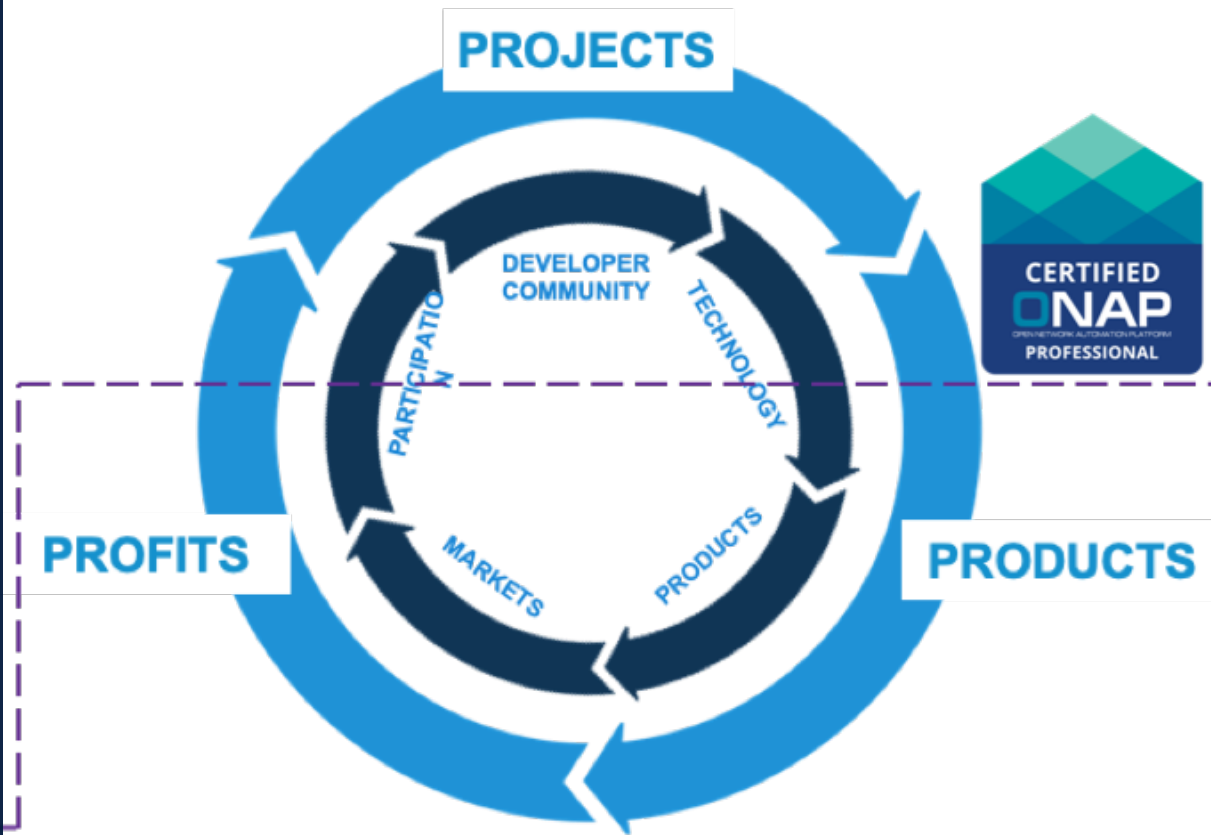
**Top Reasons
Market Creation, Adoption Acceleration &
Collaboration**

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Beyond Code

POC to Production

Open Compliance & Verification
Open Interop & Testing
Open Training & Certification



Leading Open Interop & compliance
LF Networking's Anuket (OPNFV + CNTT)
LF Edge's Akraino Blueprints

SDO or OSS

Is it Standards OR Open Source?

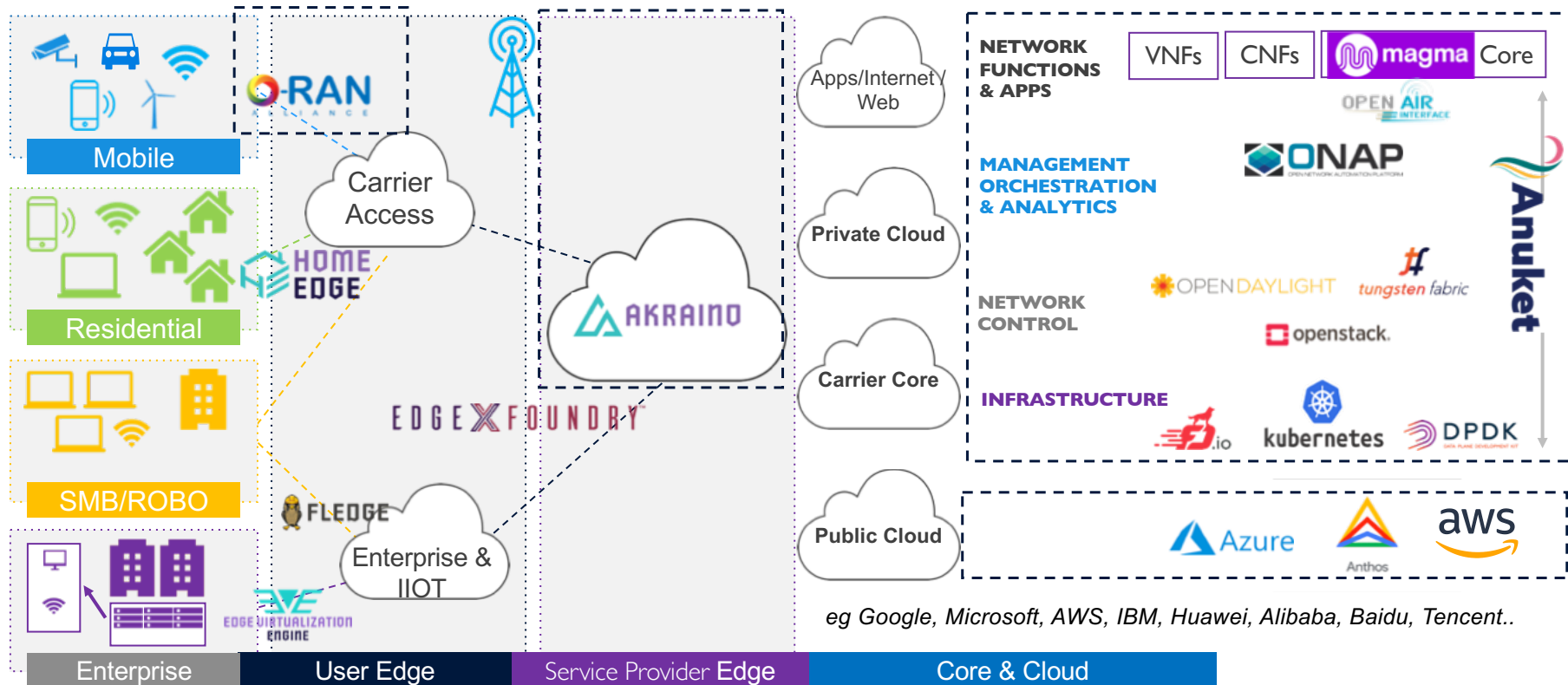
“Harmonize” was a hot word 3 years ago

Unification well beyond Standards - now Open Source communities, Markets, Verticals are taking direction from the LFN playbook



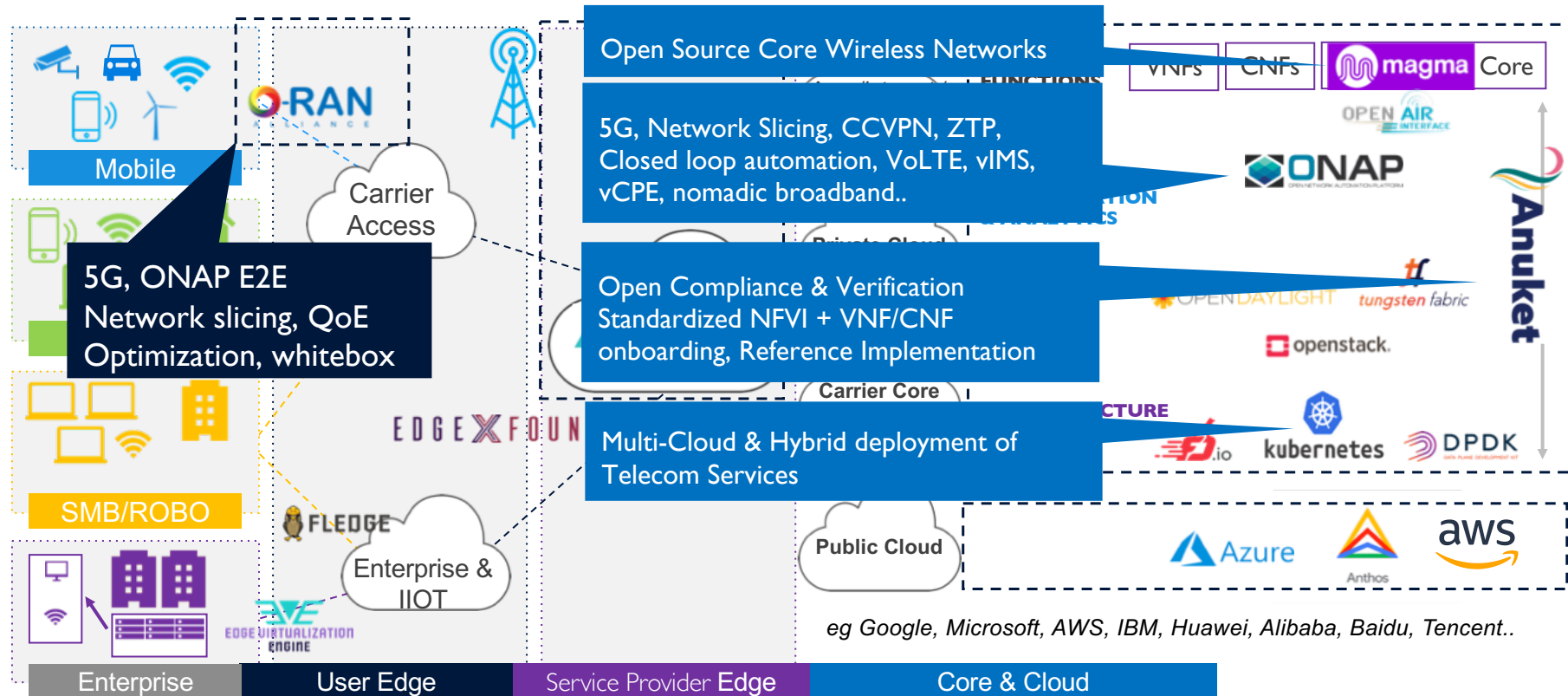
**Linux Foundation Projects are
harmonized with Standards**

End to End Open Source Software Collaboration



eg Google, Microsoft, AWS, IBM, Huawei, Alibaba, Baidu, Tencent..

End to End Open Source Software Collaboration



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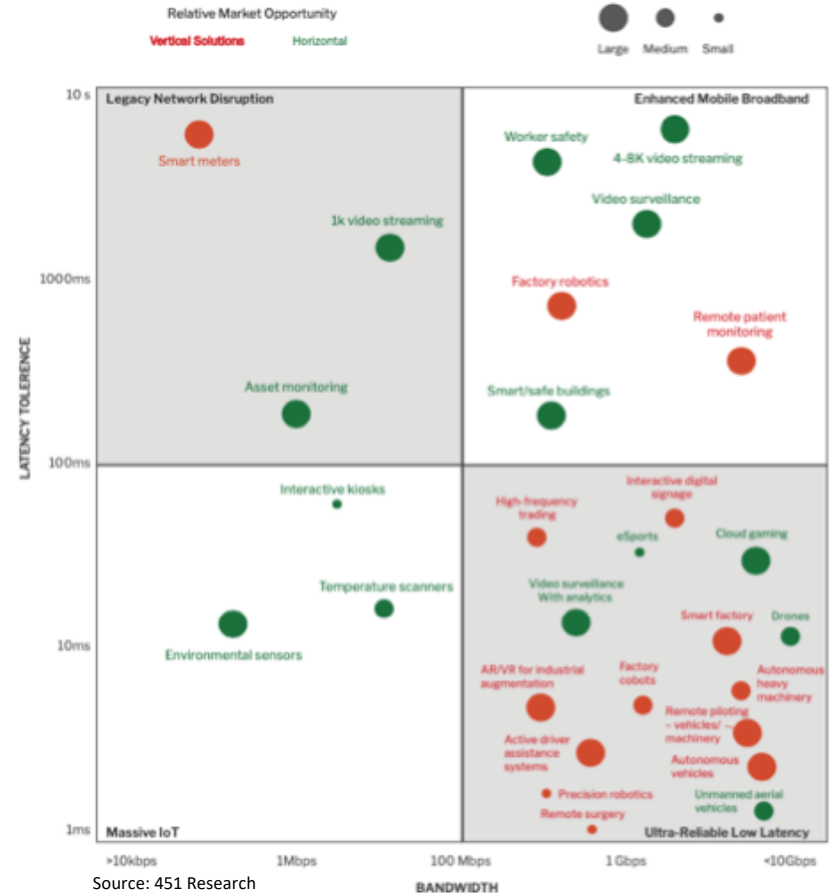
Edge Applications

New Vertical Industries Enabled by Edge

New Applications

New Revenue

New Use Cases



LF Edge Projects



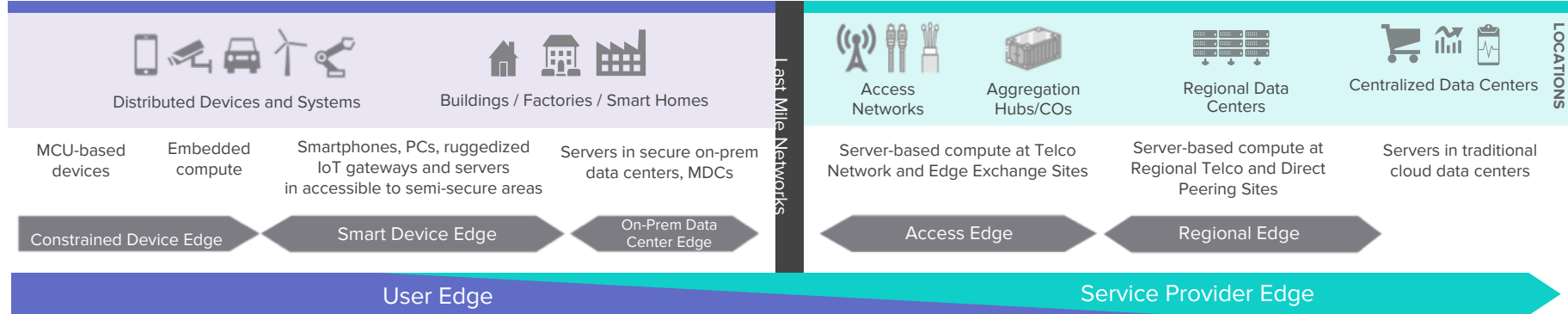
Stage 1: At Large Projects
Baetyl, Open Horizon, Secure Device

Stage 2: Growth Projects
Onboard
EVE, Fledge, Home Edge, State of the Edge

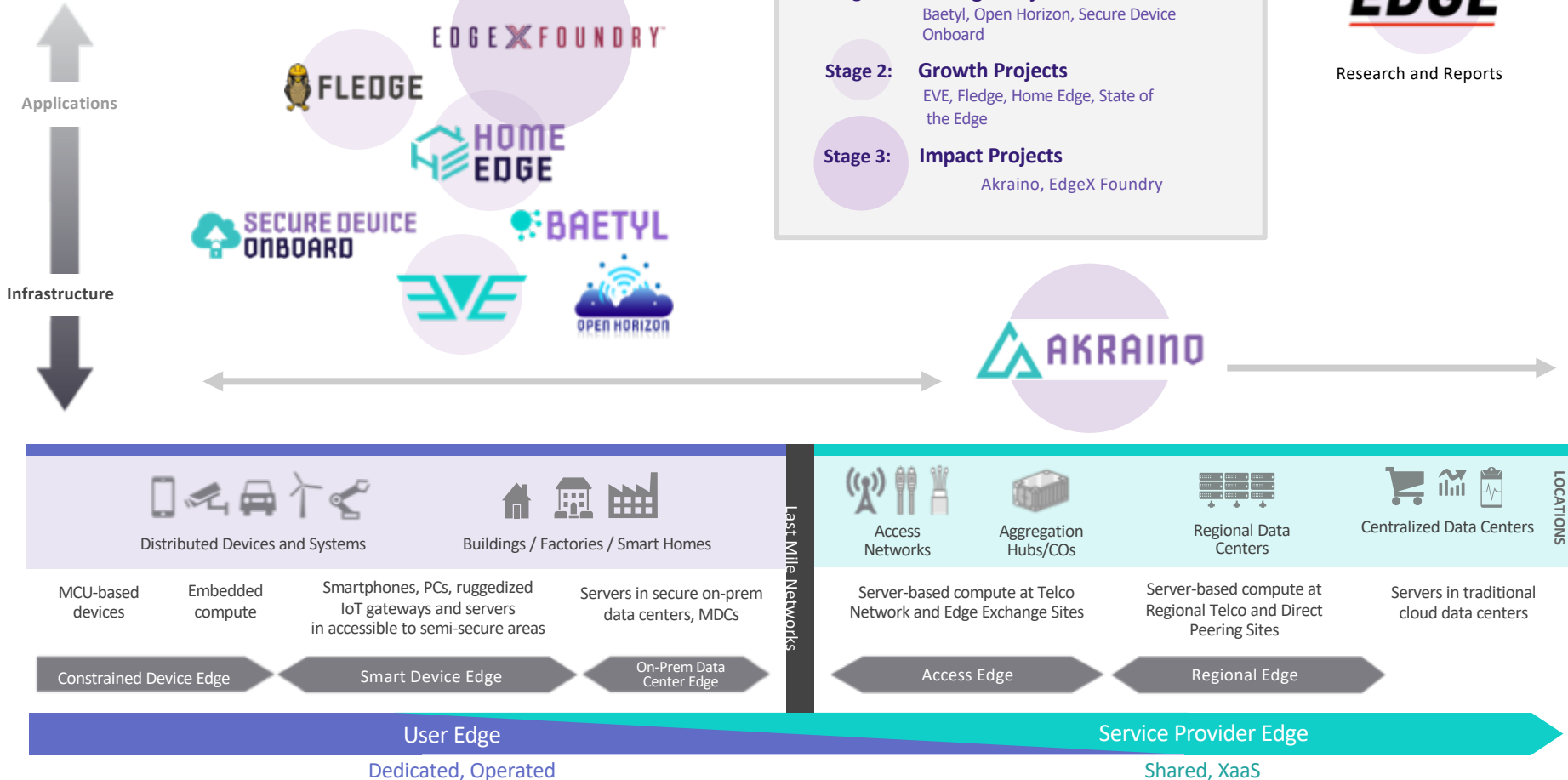
Stage 3: Impact Projects
Akraino Edge Stack, EdgeX Foundry



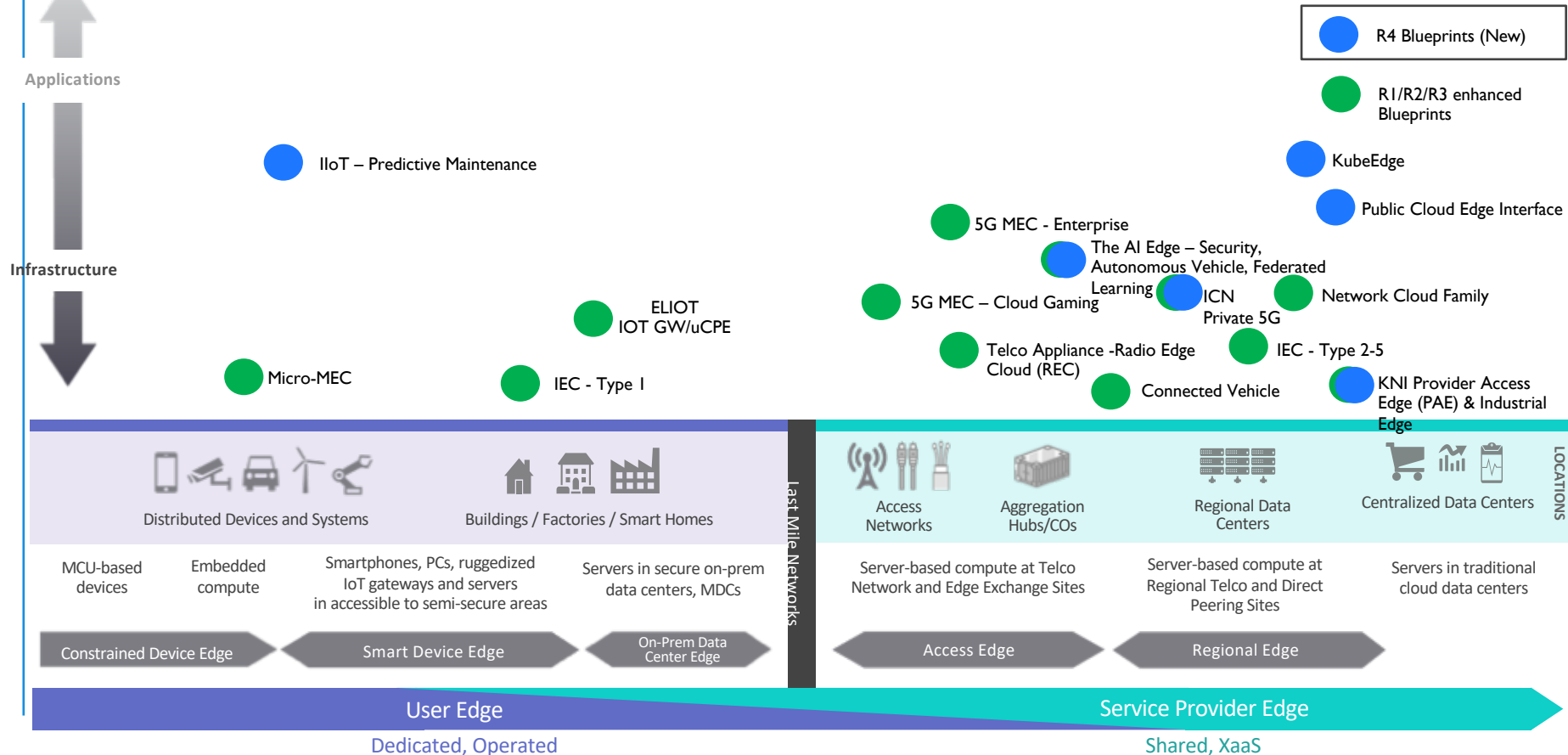
Research and Reports



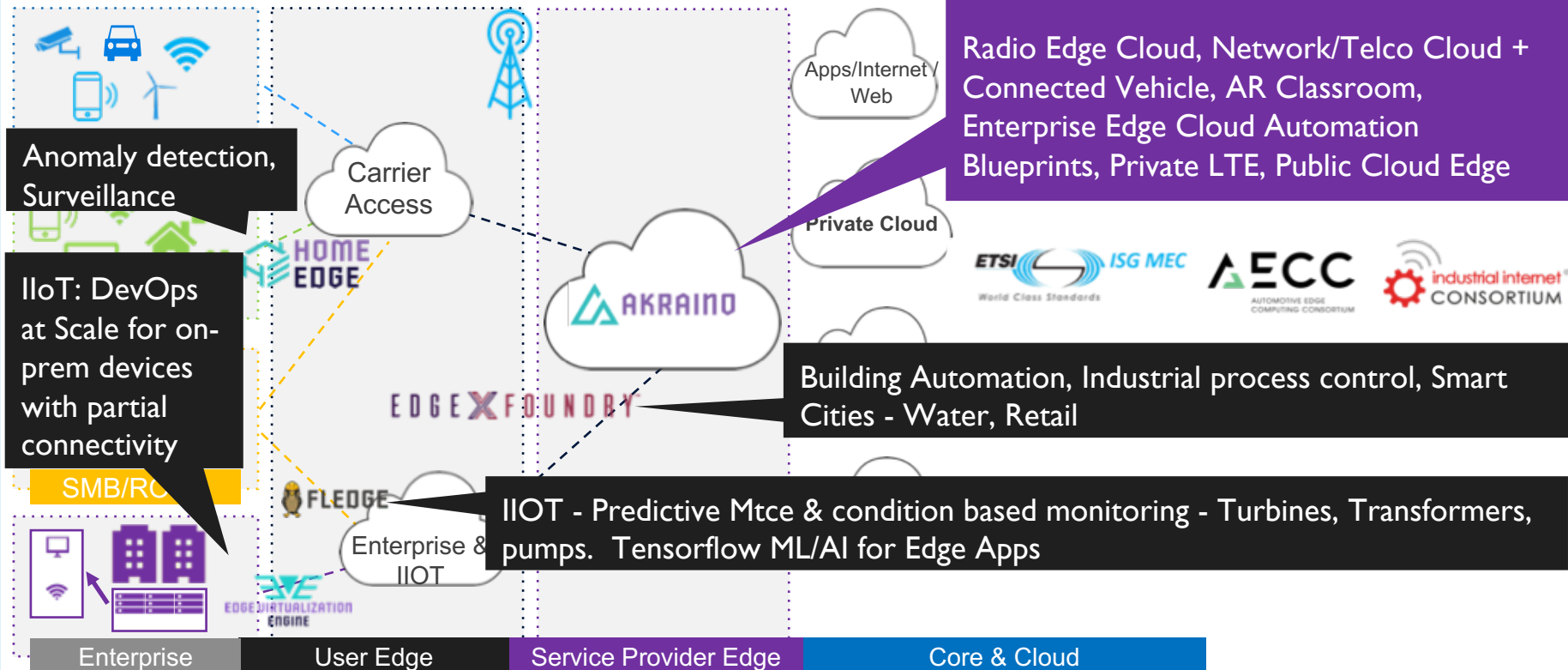
LF Edge Projects



Akraino R4 Blueprints – To be approved



Edge Use Cases Driving Open Source Projects



Observations

1. **Network is even more important in the new world!** End Users (Enterprises, Governments, Countries) have a vast array of open options using “infra/software” right near their premises
2. **Open Source Collaboration (beyond code) is the way to go.** Driven by faster innovation, security and time to revenue & deployment Use Cases
3. **Edge is new Cloud** and is enabled with technologies like 5G+Cloud+AI+IOT

What's Next

- › Upcoming LF Events: ONEEF (Open Networking & Edge Executive Forum, March 10-12)
 - › <https://events.linuxfoundation.org/open-networking-and-edge-exec-forum/>

