

The Impact of Open RAN on the Telecom Ecosystem & Role of government in Open RAN

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&

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17th June 2021

Who is Mavenir?





One Network. Any Cloud. All Software.

Mavenir is building the future of networks and is a pioneer in advanced technology, focusing on the vision of a single, software-based automated network that runs on any cloud.

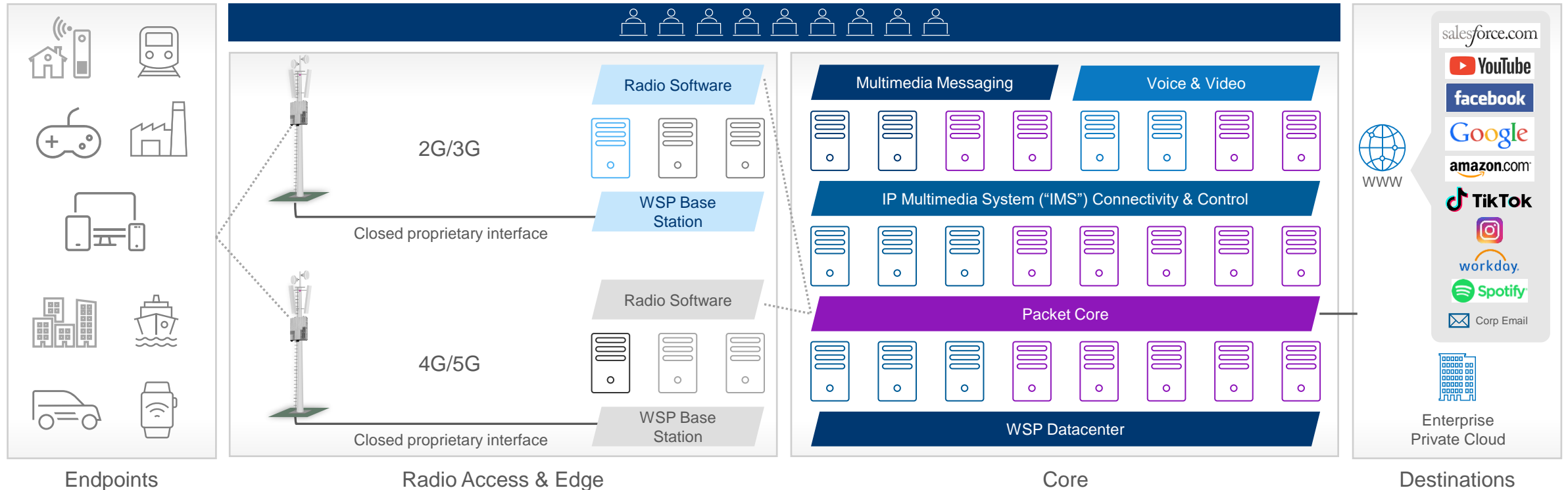
As the industry's only end-to-end, cloud-native network software provider, Mavenir is focused on transforming the way the world connects. Our services accelerate software network transformation for 250+ CSPs in over 120 countries, which serve more than 50% of the world's subscribers.

Telcos continue to carry the legacy infrastructure





- ✗ Proprietary, application specific hardware 
- ✗ WSP datacenters / base stations
- ✗ Not automated / meaningful human intervention 
- ✗ Inefficient resource utilization



- > High total cost of ownership
- > Rigid / limited scaling
- > Not ready for 5G

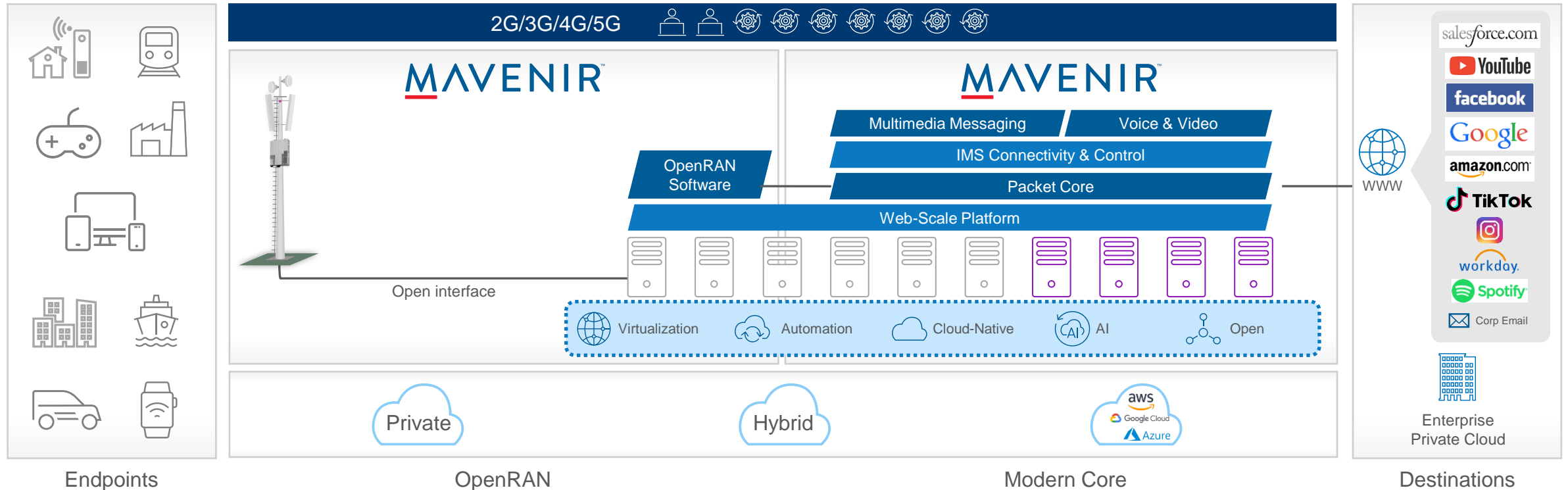


Software-Driven Approach Reduces Cost and **Increases Flexibility**

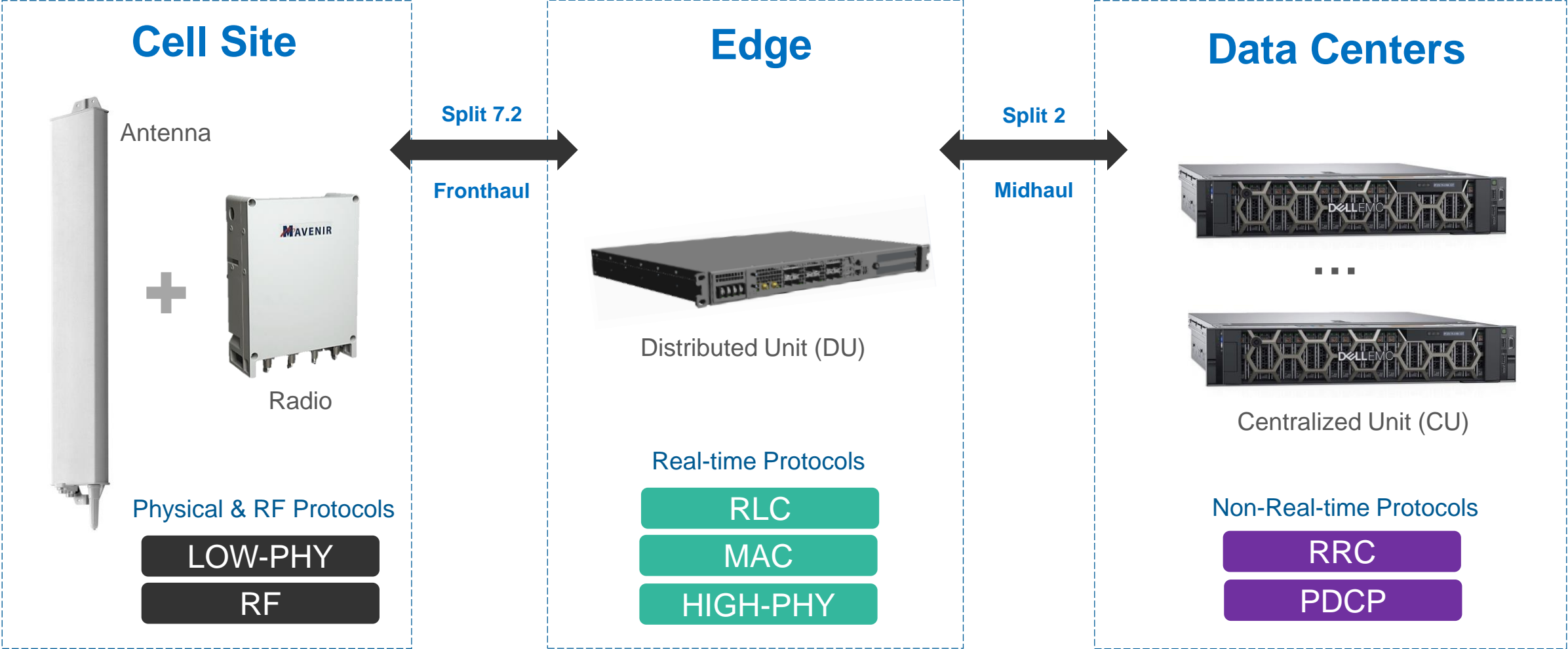
- ✓ Automated / software driven 
- ✓ Virtualized applications on commercial-off-the-shelf hardware 
- ✓ Public, private or hybrid cloud 
- ✓ Efficient resource utilization 



- > Low total cost of ownership
- > Flexible / unlimited scaling
- > Ready for 5G



Open RAN is nothing but RAN with open interfaces



The OpenRAN Ecosystem is Growing



TELECOM INFRA
PROJECT



Develop standards for open & intelligent RAN (+ some testing)

- > Founded: February 2018 (merger)
- > Members: 240 companies and research institutions
- > Board: AT&T, China Mobile, DT, NTT, Orange, Bharti Airtel, KDDI, Rakuten, Jio, Singtel, Telefonica, TIM, Telstra, Verizon & Vodafone

Develop, test and deploy open, interoperable networks around the world.

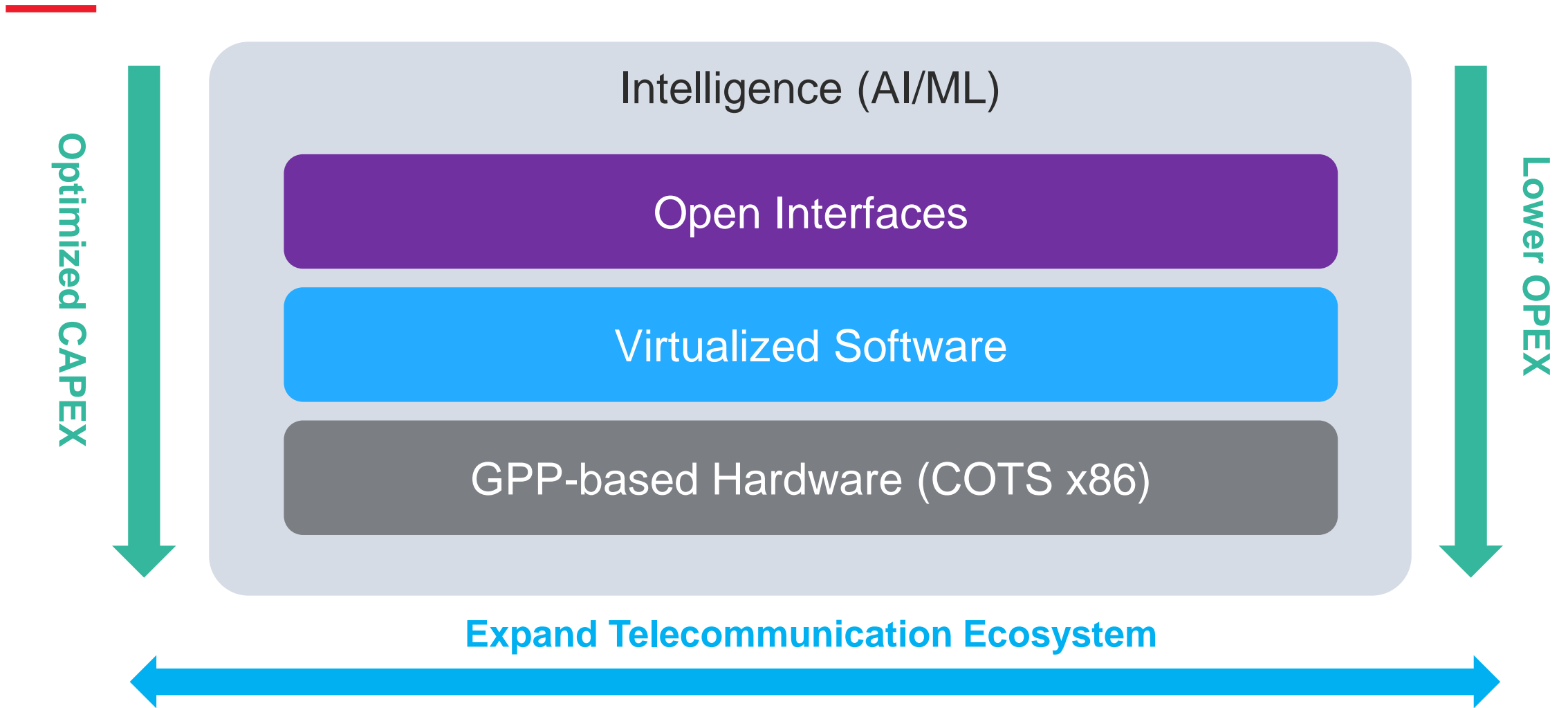
- > Founded: February 2016
- > Members: 300+ companies & research institutions
- > Board: Vodafone, Facebook, Intel, BT, Deutsche Telekom & Telefonica

Advocate for policies that will accelerate Open RAN adoption globally.

- > Founded: May 2020
- > Members: 58 companies
- > Board: AT&T, Cisco, Verizon, Qualcomm, Rakuten, Mavenir, DISH, Vodafone, AltioStar, NTT, Facebook & Intel

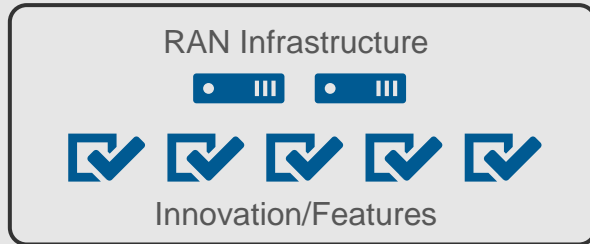
Developing the Open RAN ecosystem

Open RAN Impact on Ecosystem



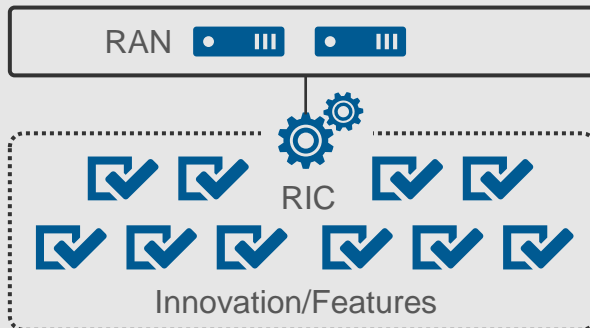
Enabling new Ecosystem through RIC

RAN



Ability of operators to increase the value of expensive RAN infrastructure and valuable spectrum assets is dependent on the innovation of one or two vendors of RAN hardware.

RIC



By giving operators access to the inner processes in the RAN equipment and the ability to define custom algorithms for their own business needs, RIC allows operators can take control of that investment and increase the value of their assets.

Security in OpenRAN

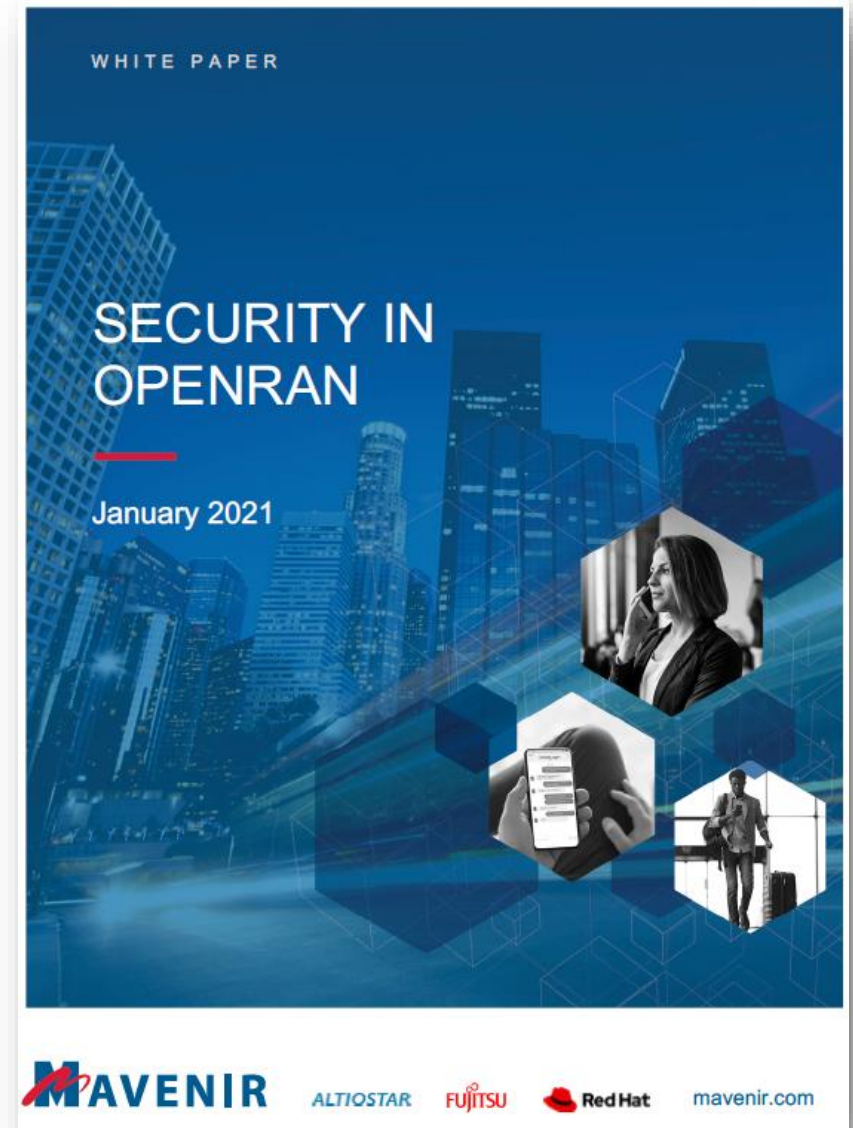
Zero-Trust Architecture

“never trust, always verify”

1. Secured communication between Network Functions
 - a. Secure communication on all interfaces
 - b. Ensuring trust-based authentication of communicating endpoints
 - c. Trusted Certificate Authorities for Identity Provisioning
2. Secure framework for RIC
3. Secured platform for Network Elements

As Dish Network’s Stephen Bye memorably put it at the FCC’s Open RAN forum (Sep 2020)

“It’s easier to find the cockroaches when the lights are on...that’s the opportunity that comes with an open environment.”



Mature and Ready for Deployment

- > Interfaces from O-RAN are complete and evolving
 - Like any other standards body
- > Power Consumption of Virtualized RAN are better than legacy RAN
- > COTS components improve cost and time to market
- > Low on Investment and High on Innovation





Role of Govt in Open RAN

We would like Govt of India to take necessary steps towards making Open RAN architecture mandatory in Telecom networks to promote competition, innovation and network vendor diversity.

Offer SOP's to CSP's on procurement of such Open platform infrastructure

SOPs to create environment for major Telecom system integrators and specifically, Indian IT companies to join the bandwagon to offer end to end Telecom equipment and services to India and global market

Interactive forums to ensure equal participation from industry disrupters

It is a watershed moment for India to become global leader in Network Equipment provider space by being early adapter of Open RAN and drive global market in Telecom gear



Thank You