Bring The **Power Of Edge** To CSPs

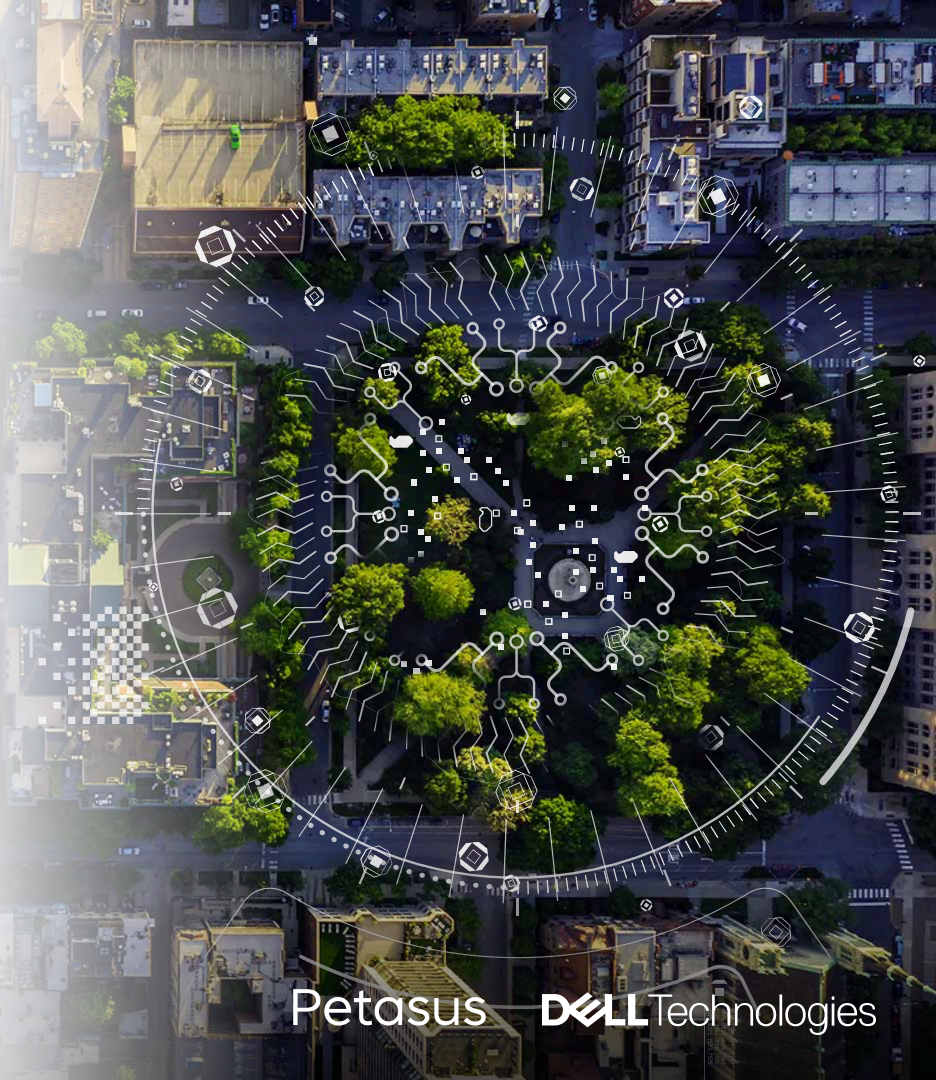
Petasus 5G MEC Platform On Dell

RCR Wireless Webinar Presentation

DR. SHIN SANGHO – SK TELECOM

KAPONIG BERND – DELL TECHNOLOGIES

YASUDA KOHEI – DELL TECHNOLOGIES



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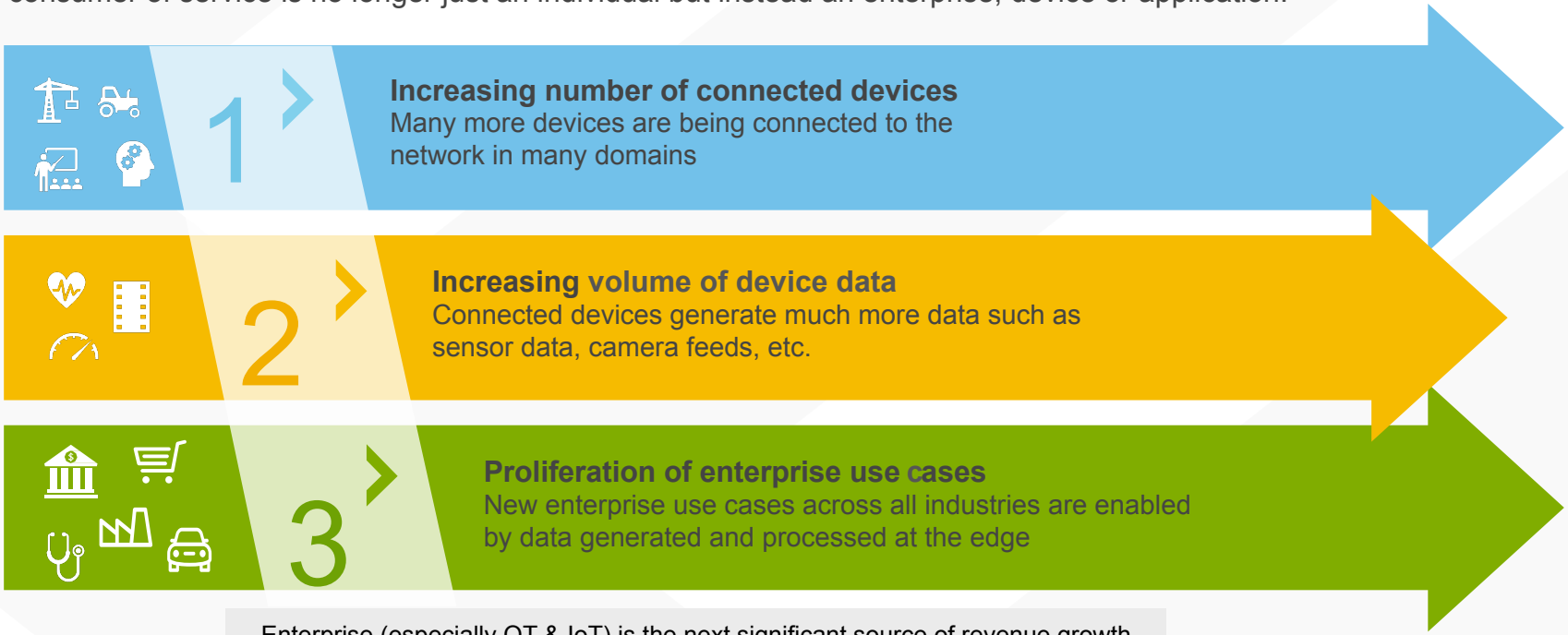
5G Is **The "Enterprise G"**

End-consumer of service is no longer just an individual but instead an enterprise, device or application.



Enterprise (especially OT & IoT) is the next significant source of revenue growth

Monetizing digital services requires a platform and an ecosystem

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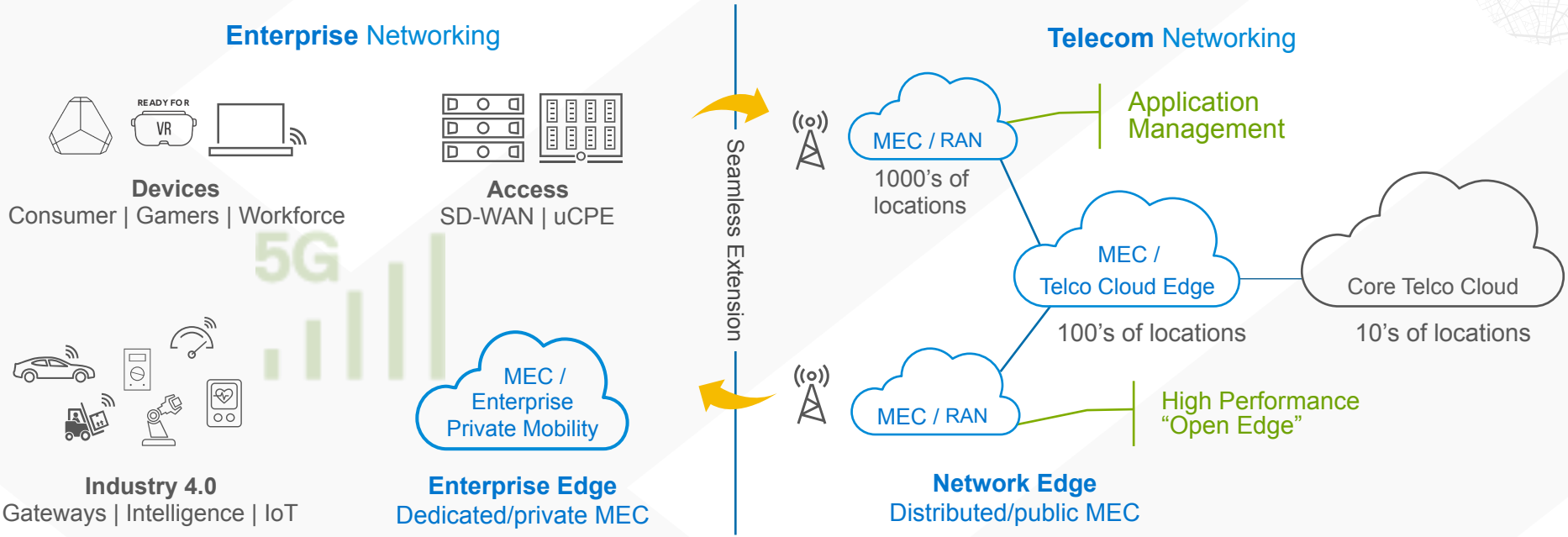
Telecom Services @ the Edge. **A Convergence**

The Telecom Services Edge is a convergence point of the enterprise network and the telecom network.



Multi-access edge compute is the convergence of **Telco Cloud and IT Cloud in the RAN**

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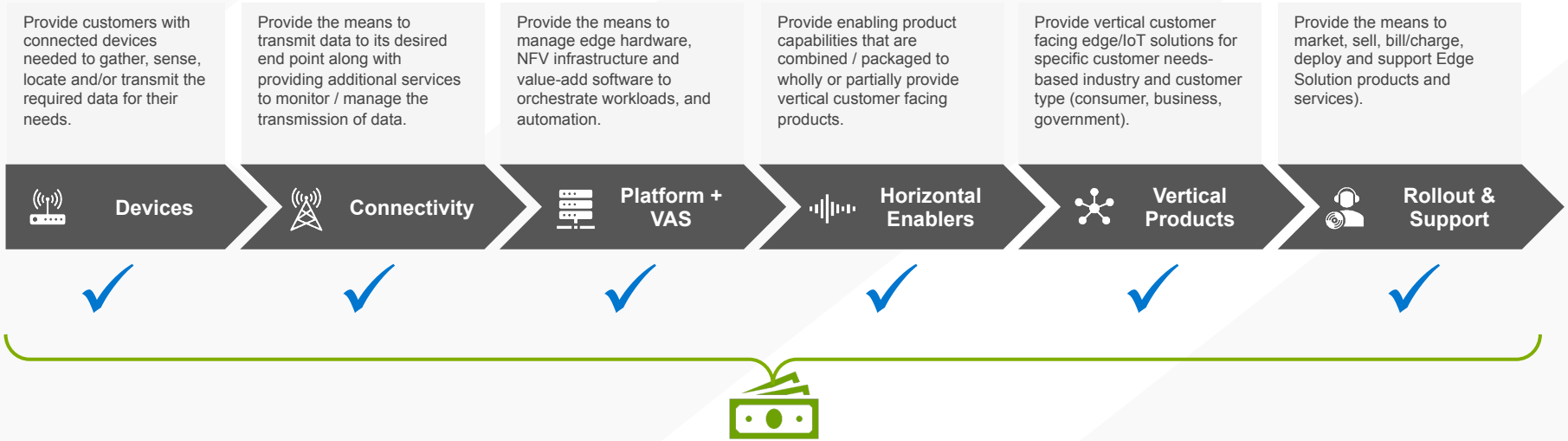
Edge Compute **Value Chain**

Revenue generation needs a set of components to come together to achieve outcomes desired by an enterprise.



It takes a combination of these functions to CREATE OUTCOMES that meet an enterprise need in order to GENERATE REVENUE from enterprises

✓ DELL as a **partner**

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Business **Opportunity** & Customer **Challenges**

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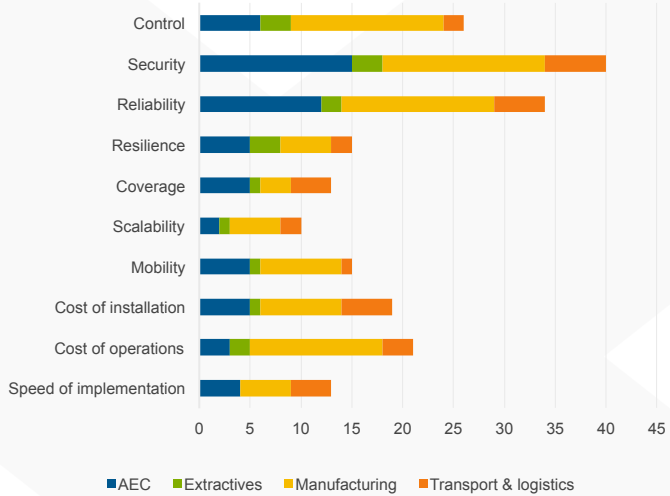
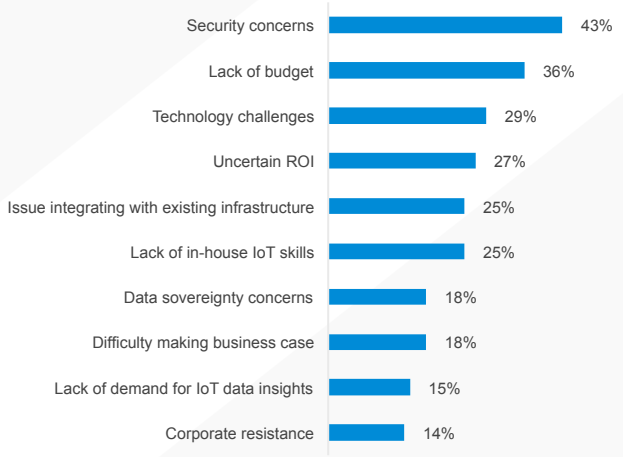
Enterprise Pain Points

Primary research by different analysts is broadly in agreement over enterprise issues.

Security | **Cost** | **Uncertain ROI** | **Complexity** | **Connectivity**



Source: STL partners (Sep 2020)



Source: 451 Research VotE 2021

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Metrics

$3.7B USD

Worldwide Market size value of MEC in 2021[1]

$38.6B USD

Worldwide MEC Market size forecast by 2028[1]

33.7% CAGR

MEC growth rate, CAGR from 2021 to 2028[1]

256+

Major companies doing MEC business already and this number is increasing rapidly. [1]

32 hyperscaler local zones

Hyperscalers are rapidly expanding MEC business through partnership with Telco's. [3]

$2.3B USD

Global Investment into Private 5G network by 2025. [2]

$9.3B USD

Global investment into Private 5G Network by 2030. [2]

65% CAGR

Private 5G network growth rate global, CAGR from 2021 to 2030[2]

1 Fierce Wireless, 2019
2 https://www.jeita.or.jp/japanese/topics/2019/1218-2.pdf
3 https://www.infoq.com/news/2021/12/aws-local-zones-expansion/

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Dell **Telecoms Strategy**

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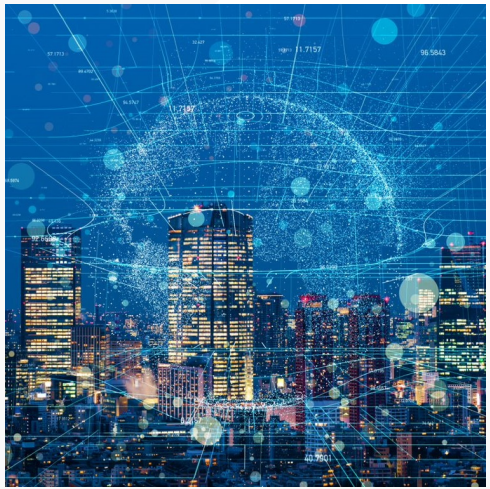
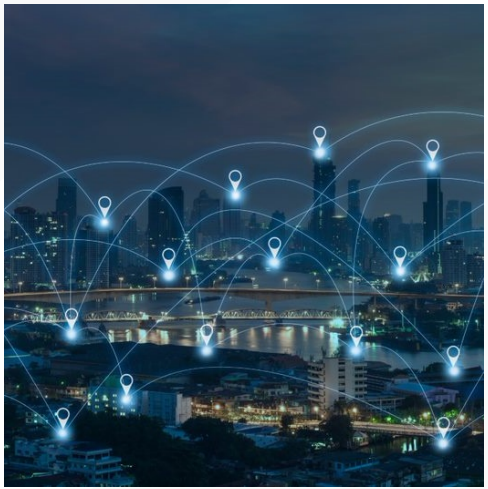
Leading Telecom's **Open Future**



Co-creating revenue opportunities with **Solutions Co-Creation Services**

Accelerating partnerships with **Strategic Alliances**



Uniting the open ecosystem in our **Open Telecom Ecosystem Lab**

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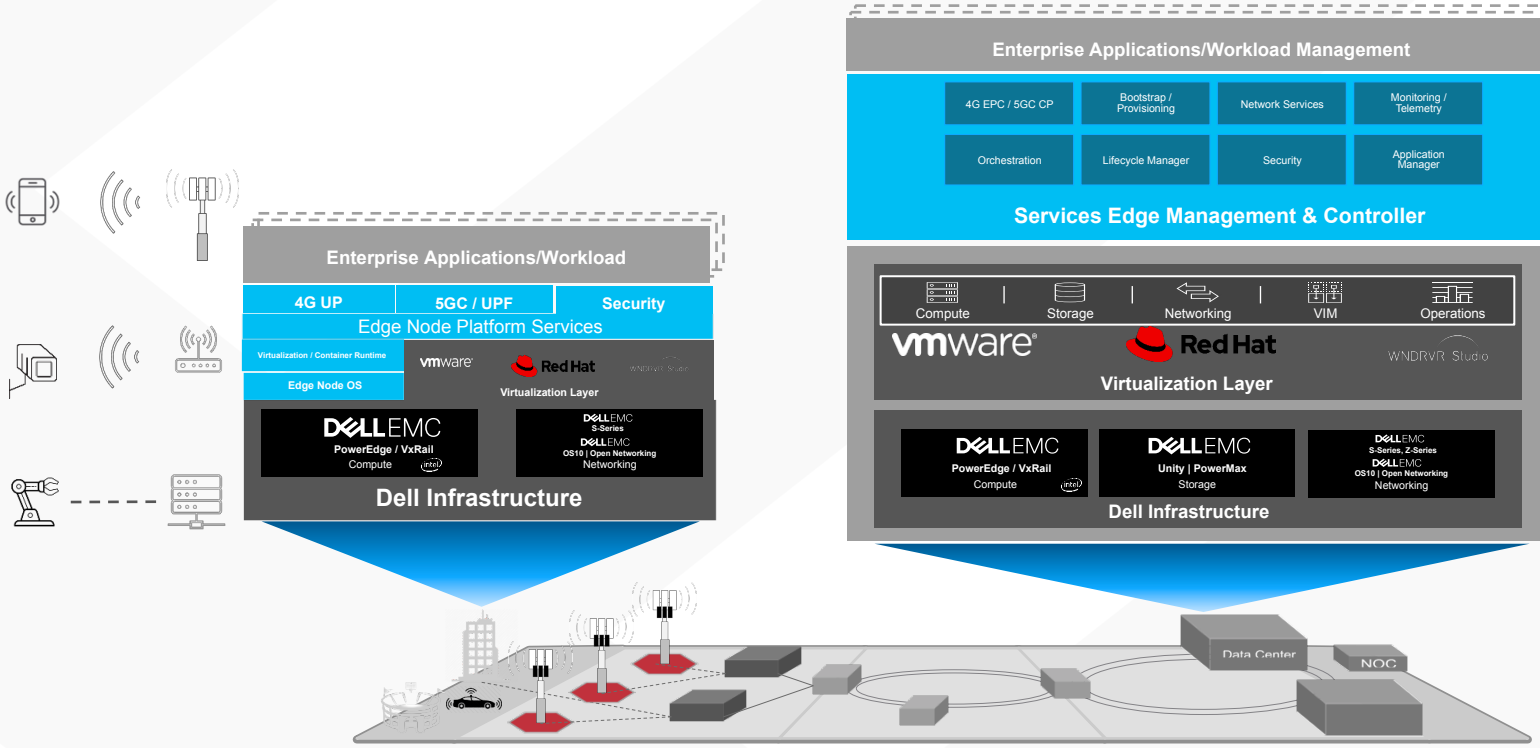
Platform + Ecosystem



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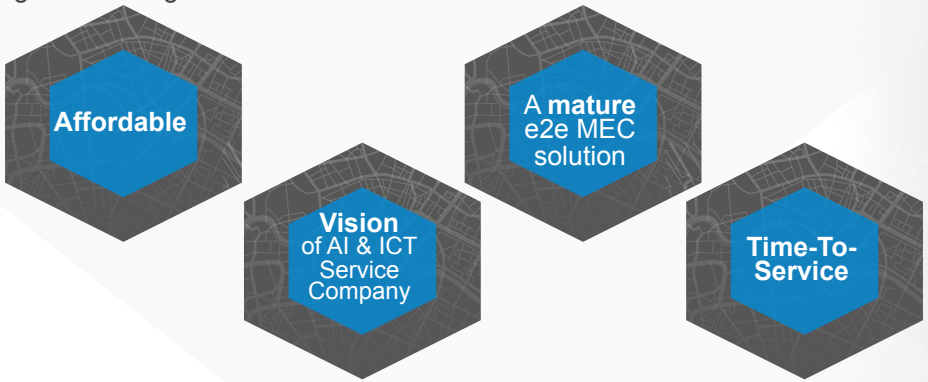
Why SKT Develops It's MEC Platform/Business, with Dell?

SKT visions itself as a "AI & Digital Infrastructure Service Company", rather than a "dumb pipe".

The need to stand up to technology challenges from verticals' who demand digital transformation **now** (media verticals), particularly in time-to-service and service performance.

Responding to government initiatives who are obliged to provide essential services critical to society fabric (e.g. transport, road safety, city surveillance, healthcare)

Lack of mature e2e MEC solutions in market. Ad-hoc features available but need a significant integration effort.



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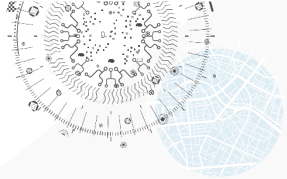
Solution **Architecture:** Today



Customer-facing Services

MEC Platform &
Edge Cloudlet Management

MEC Infrastructure Functions

Multi-access Edge
Data Plane processing

MEC Biz Console | **Order** Management | **Hybrid MEC** Service | **Service** Manager

MEC Platform Manager | **Petasus 5G** Edge | **CSP** Edge | **Fulfillment** | **Assurance**

Edge Virtual Infrastructure Manager | **Edge**Stack

MEC Router

GPU

AI chips

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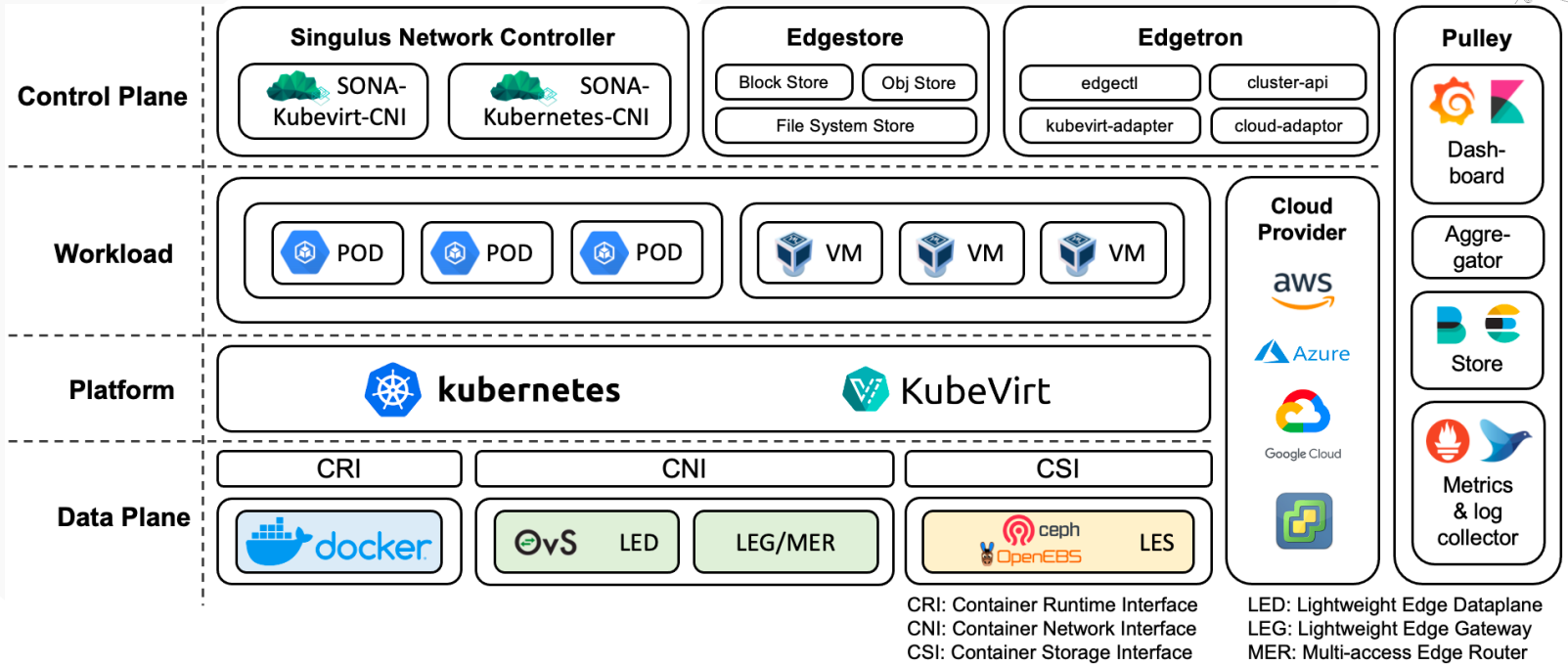
EdgeStack Architecture



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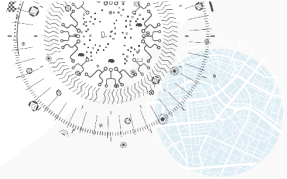

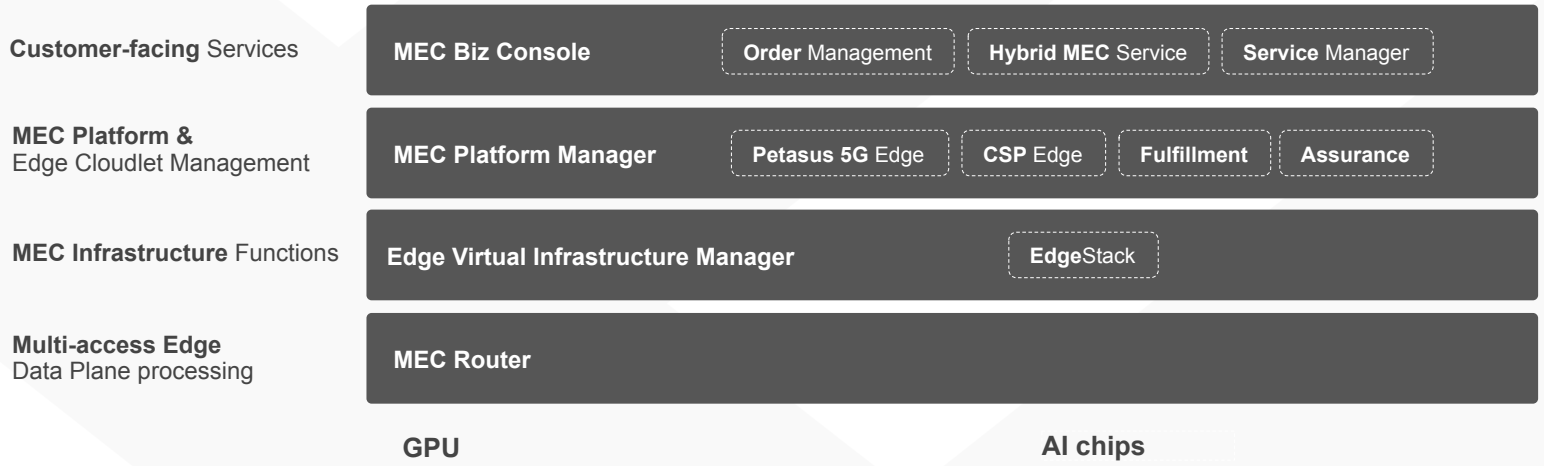

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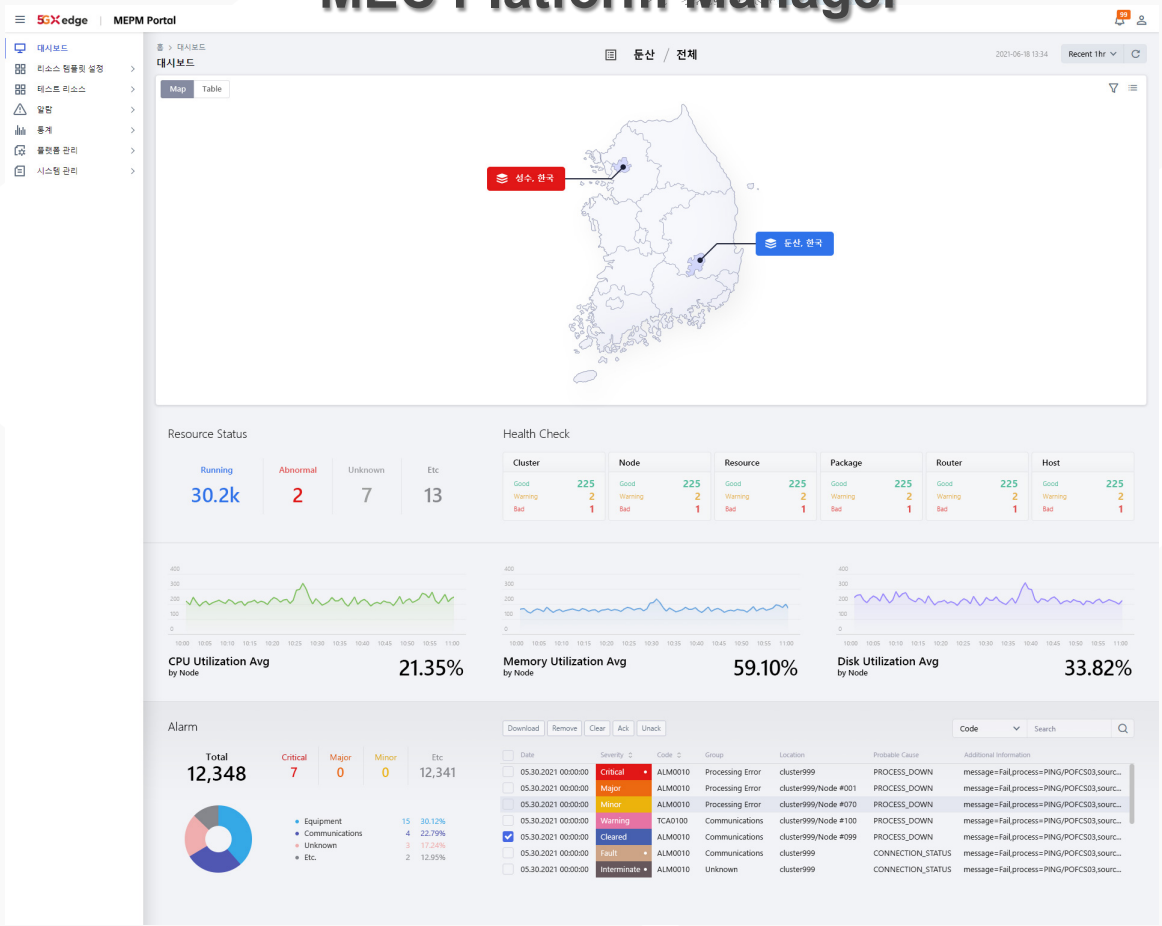
MEC Platform Manager



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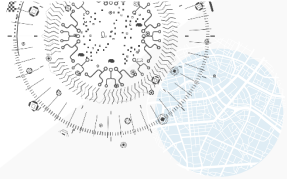
Solution **Architecture:** Today



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GPU

AI chips

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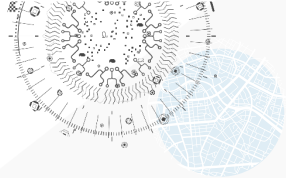
Solution **Architecture: 2022**



Domain-specific MEC Products

Media Edge Product

Media Edge PaaS
SDK
App

Customer-facing Services

MEC Biz Console | **Order** Management | **Hybrid MEC** Service | **Service** Manager

MEC Platform &
Edge Cloudlet Management

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MEC Infrastructure Functions

Edge Virtual Infrastructure Manager | **Edge**Stack

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MEC Router

GPU

AI chips

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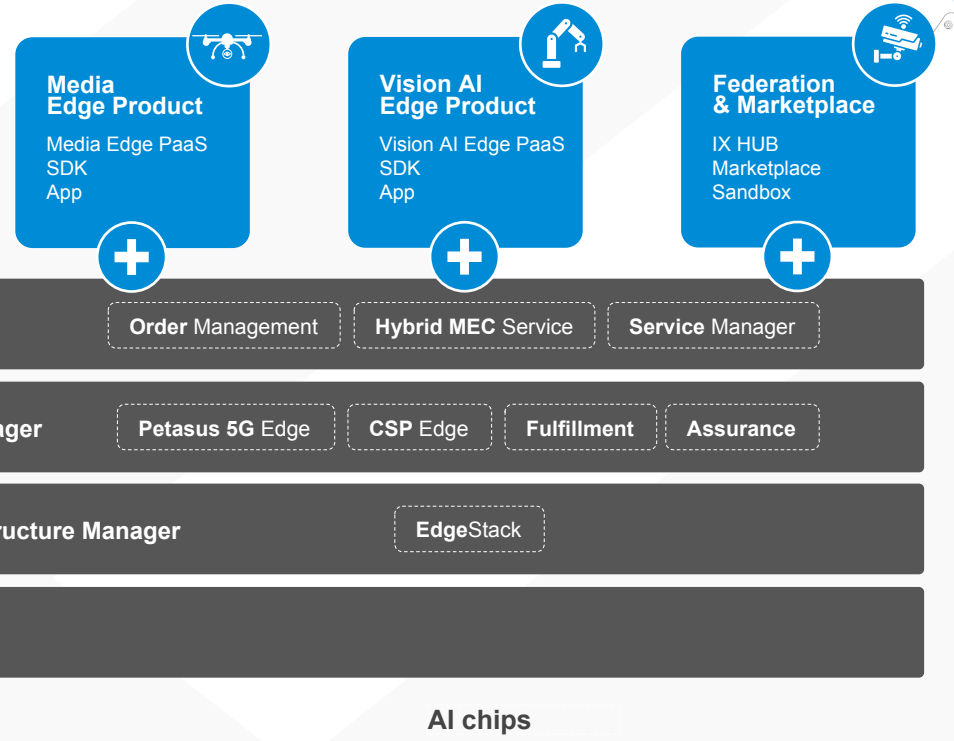
Solution **Architecture: 2023**



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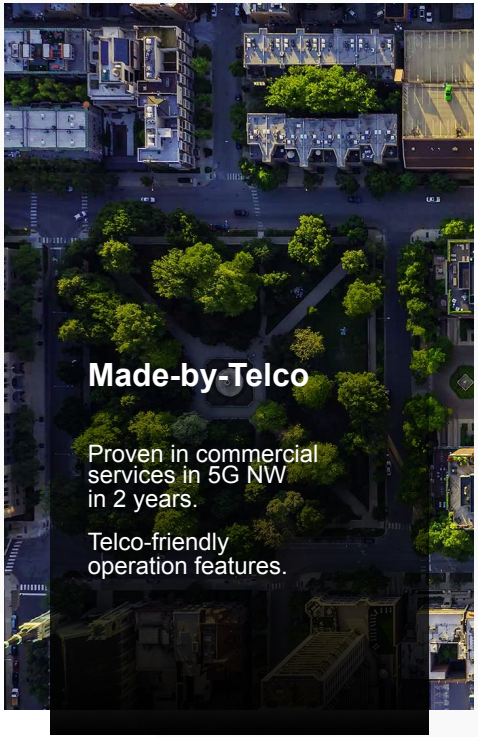
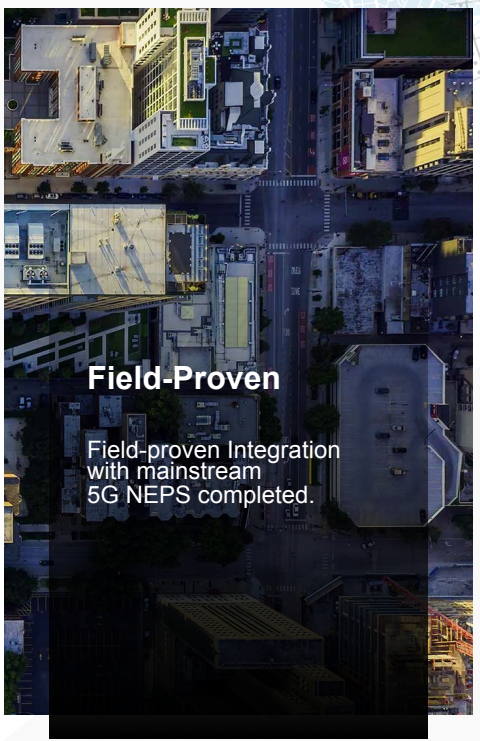
Why Are **Service Providers Excited?**





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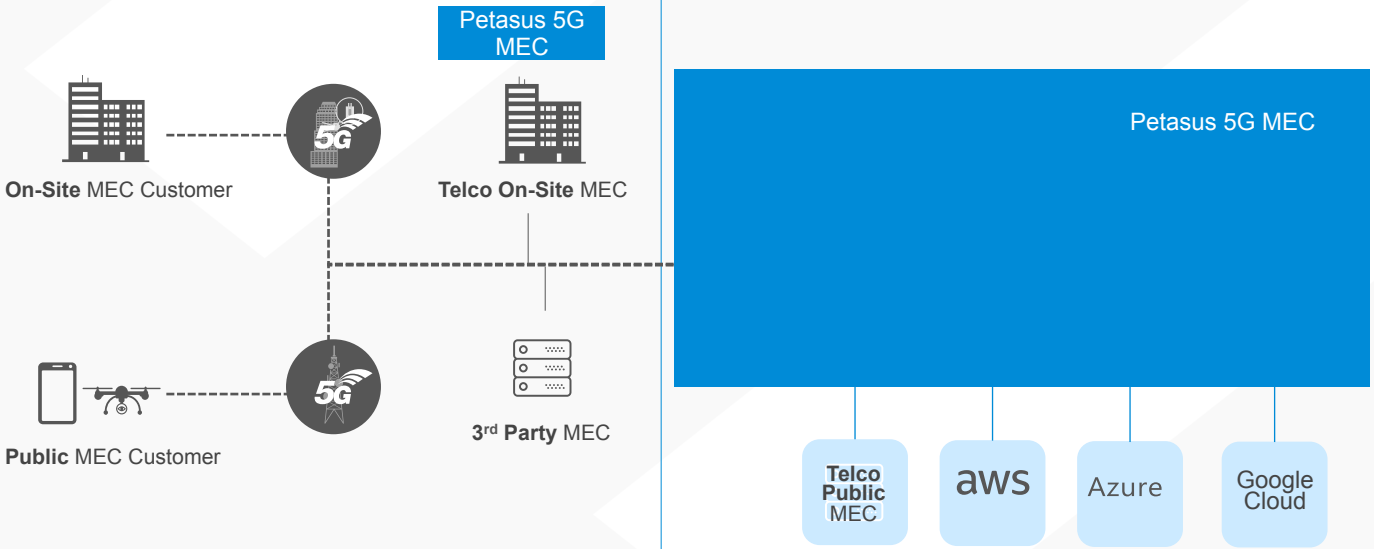
Petasus 5G **Solution Highlight**



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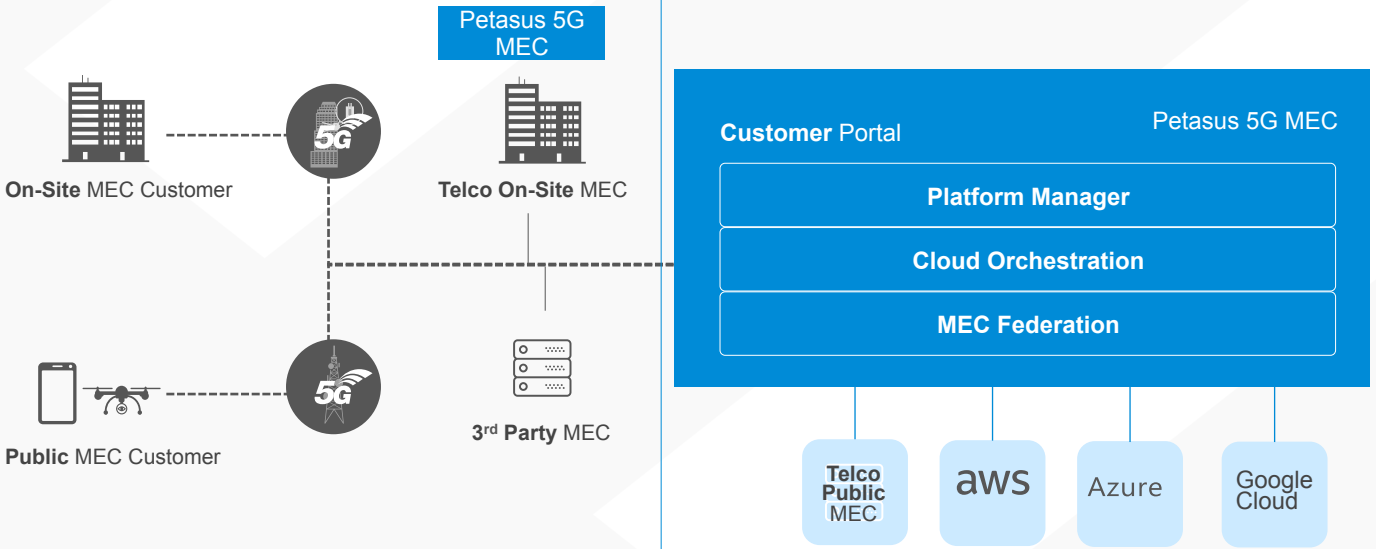
Petasus 5G MEC **Solution Highlight**



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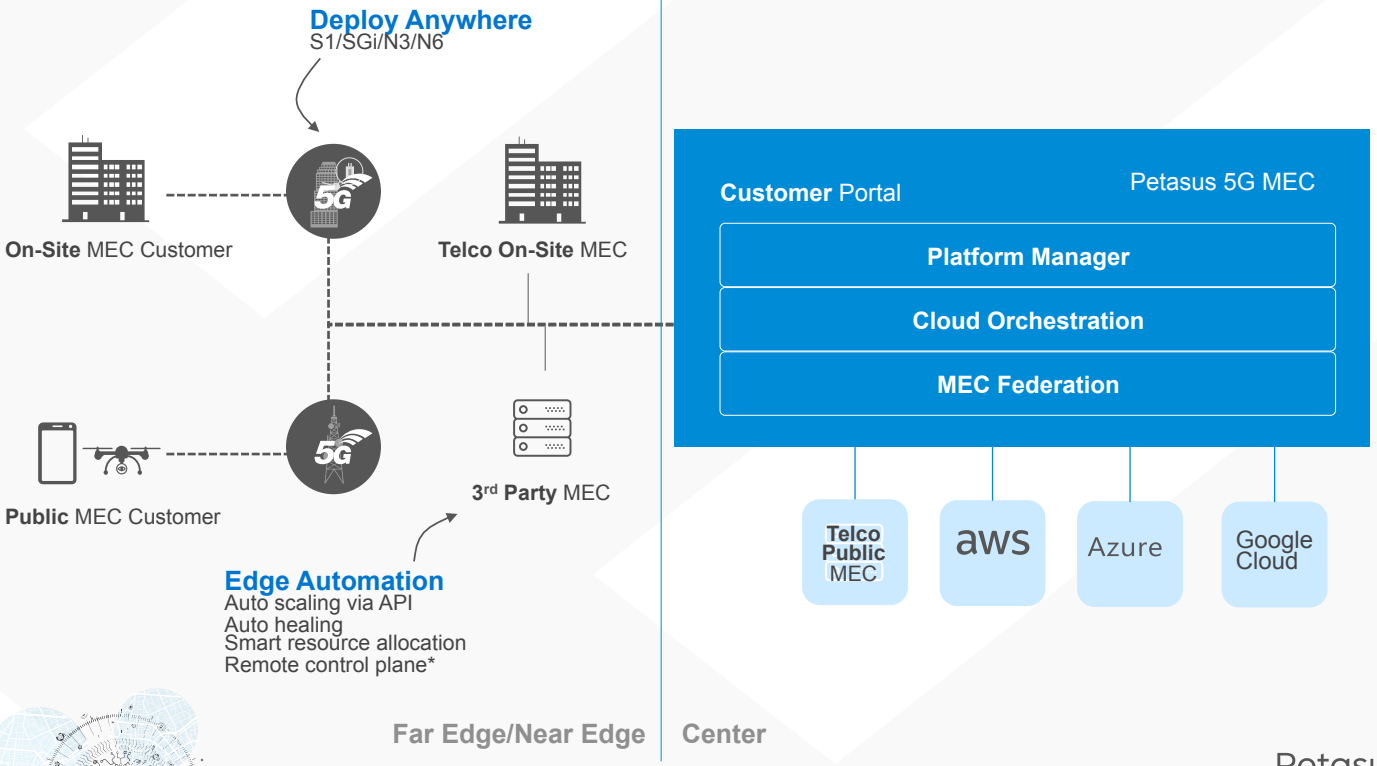
Petasus 5G MEC **Solution Highlight**



* To be available in MEC3.0/4.0

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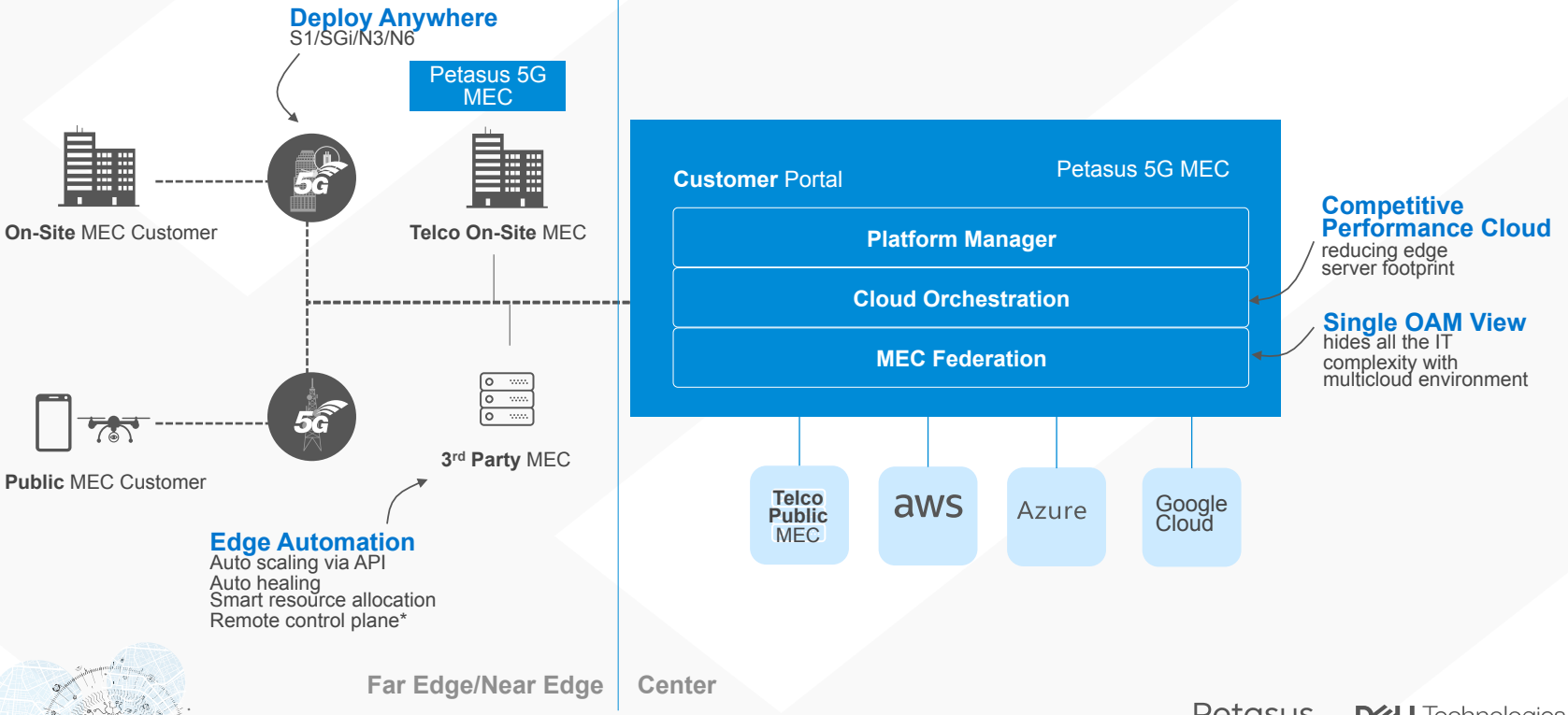
Petasus 5G MEC **Solution Highlight**



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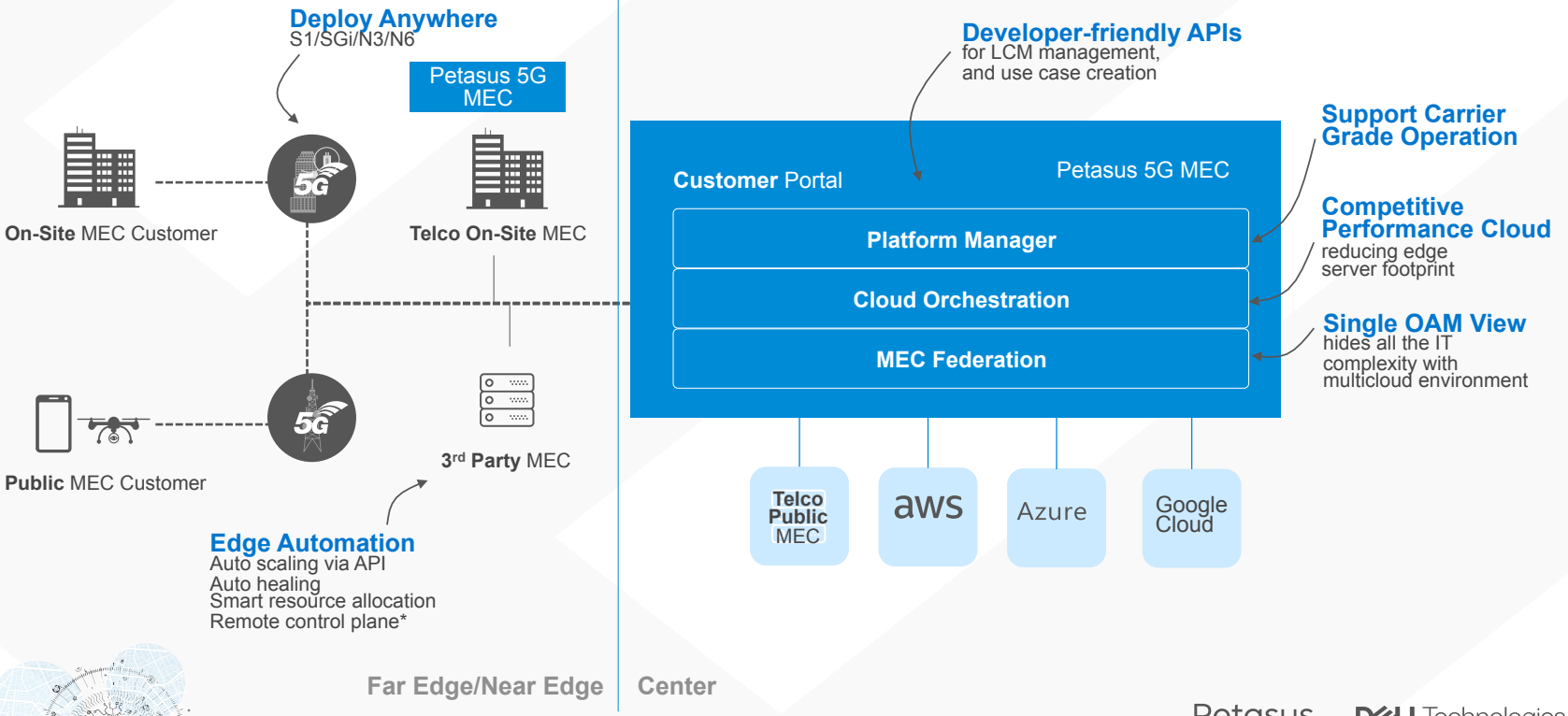
Petasus 5G MEC **Solution Highlight**



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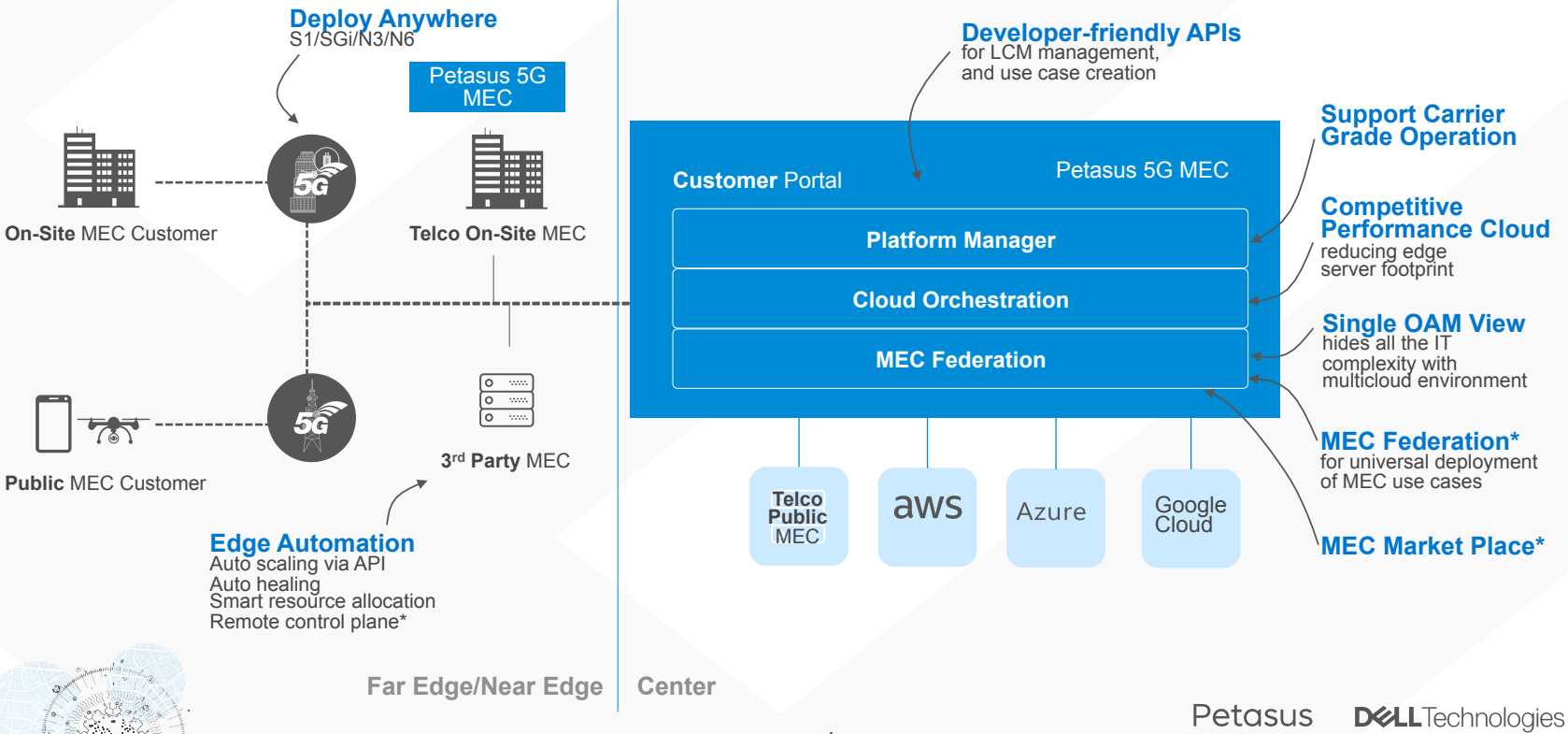

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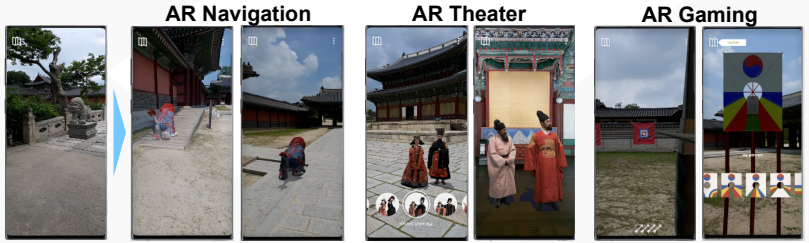
B2C 5G MEC Services

Changdeok ARirang

Using 5G MEC & and AR to improve the visitors experie
nce of palaces with many physical barriers

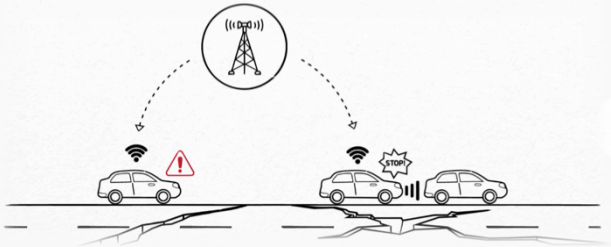


Video Call Education Service

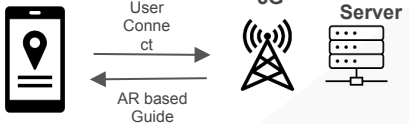
'High Quality (QHD)' Commercial Service, Video/Voice/Text
Communication through group call

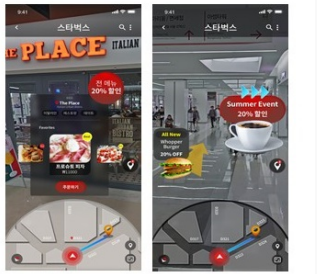
Road Breakage Monitoring Service

Ultra Low Latency Infrastructure for Autonomous Driving,
Connected Car Communication



AR Indoor Navigation Service





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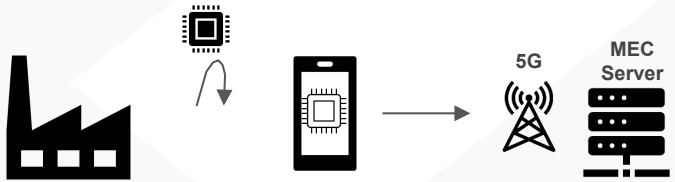
B2B 5G MEC Services

Device Memory Test

Device Test with MEC use cases



Shinhan Bank

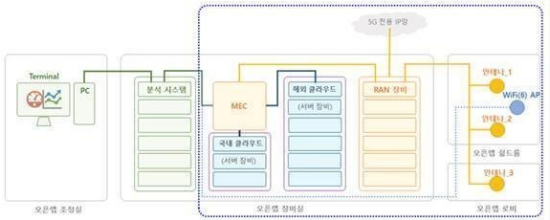
Testbed for Financial Application & Kiosk

Vision AI based Smart Quarantine Service

MEC based more accurate & immediate patient detection & notification

NIPA Open Lab

MEC Open Lab for MEC service providers



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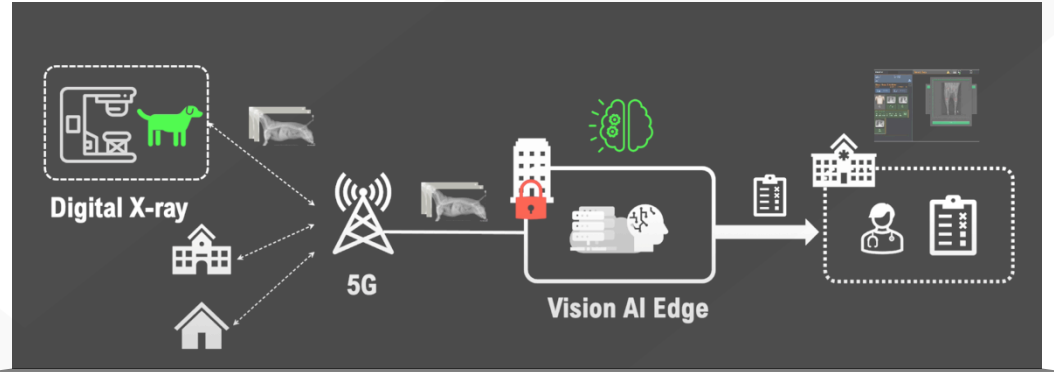
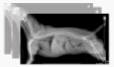
Vision-AI

Vision AI is used to analyze the X-ray image from animal hospitals and detect diseases automatically.



【Vet Hospital X-ray Room】



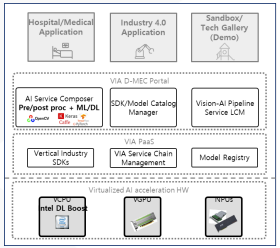
DX image transfer

Nanox.ARC or existing X-Ray device

- X-ray images
- Dental X-ray images
- Other diagnostic images such as CT, MRI, Ultrasound

EMR, PACS, Electronic medical info, Image transmission service

X-ray image transfer



Vision AI analysis result transfer

Animal Hospital

5G MEC

Vision AI Service

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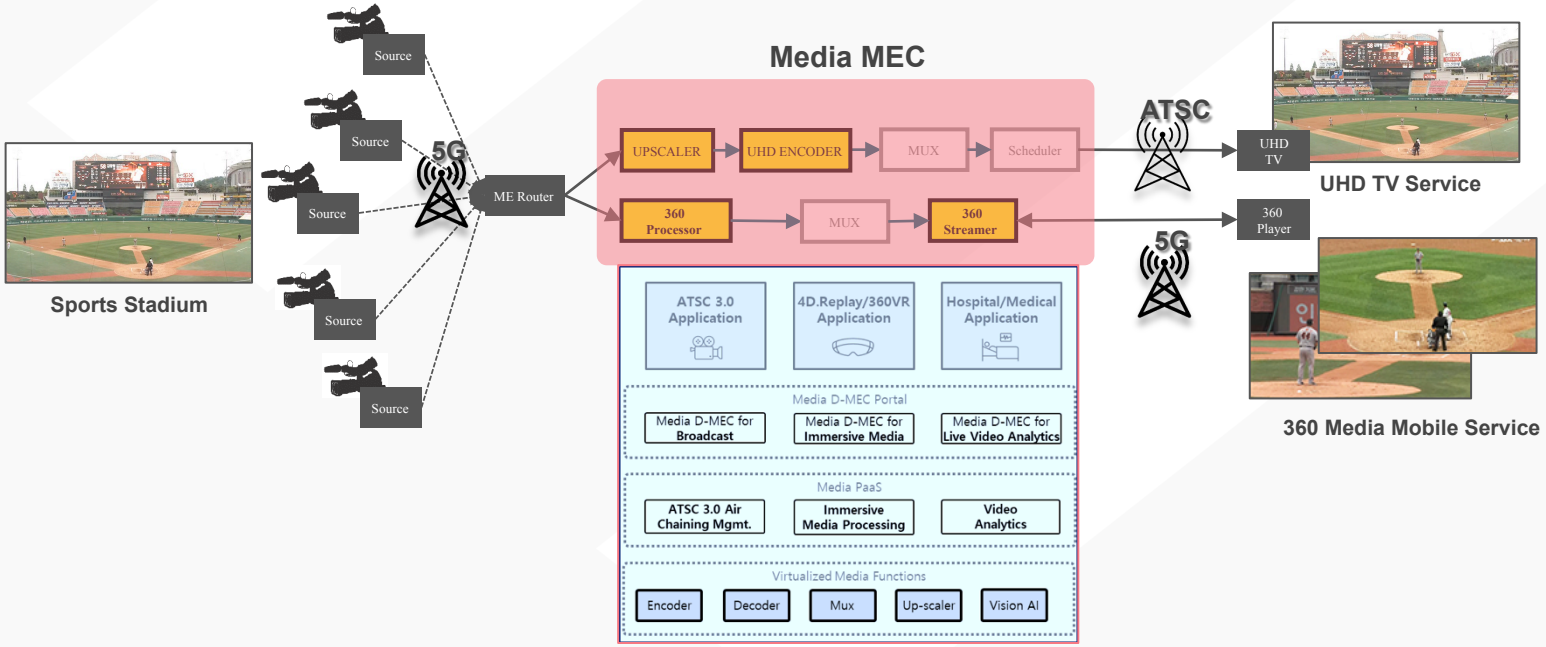
360 Degree (4D) Camera

Media MEC is used to process and create 360 degree (4D) video using multiple cameras installed in sports stadium.



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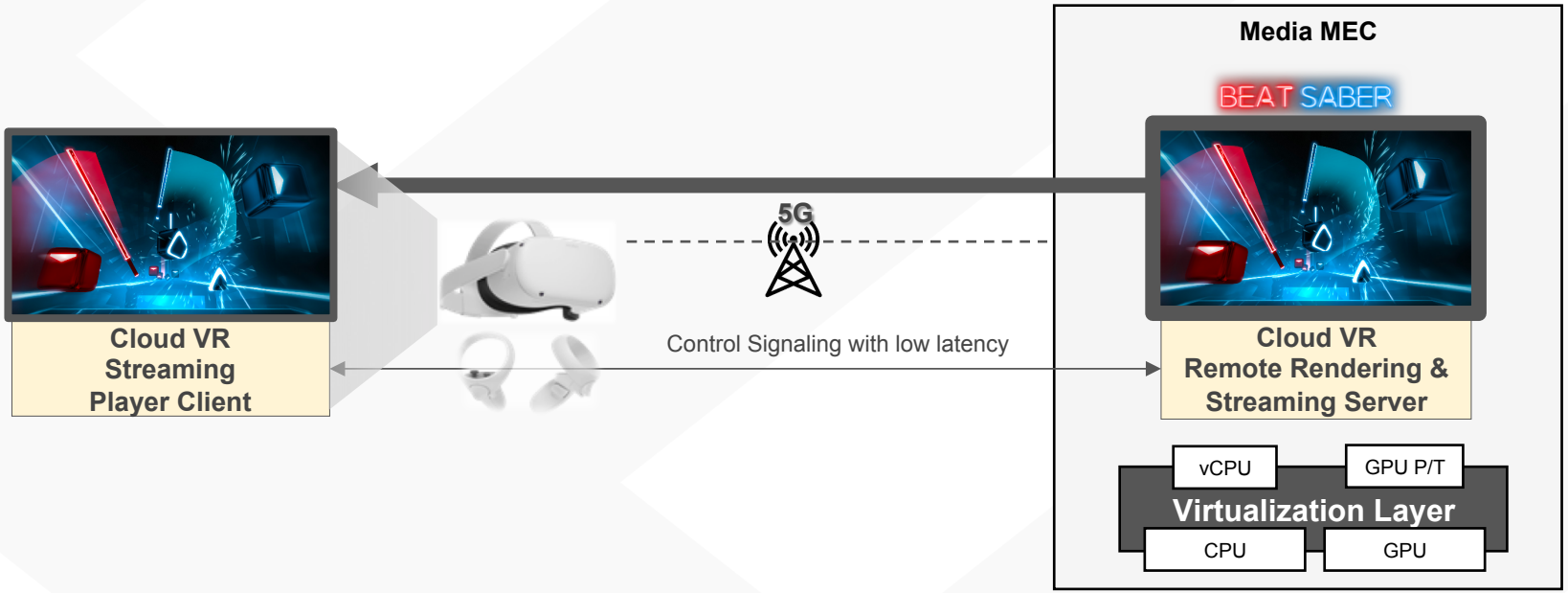
Immersive Cast – Cloud Gaming

Media MEC provides the VR rendering feature with **higher resolution** than device rendering and **lower interaction latency** than public cloud.



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Call To Action On Dell Sales

Enable your 5G Mobile Edge business with just one call to Dell!

Solutions Co-creation Services: **cocreate@dell.com**

Telecom System Business – Solution Sales, Dell Technologies

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