sodacon 2020

DATA CONNECTED

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Data Management at Edge for Edge Native Services

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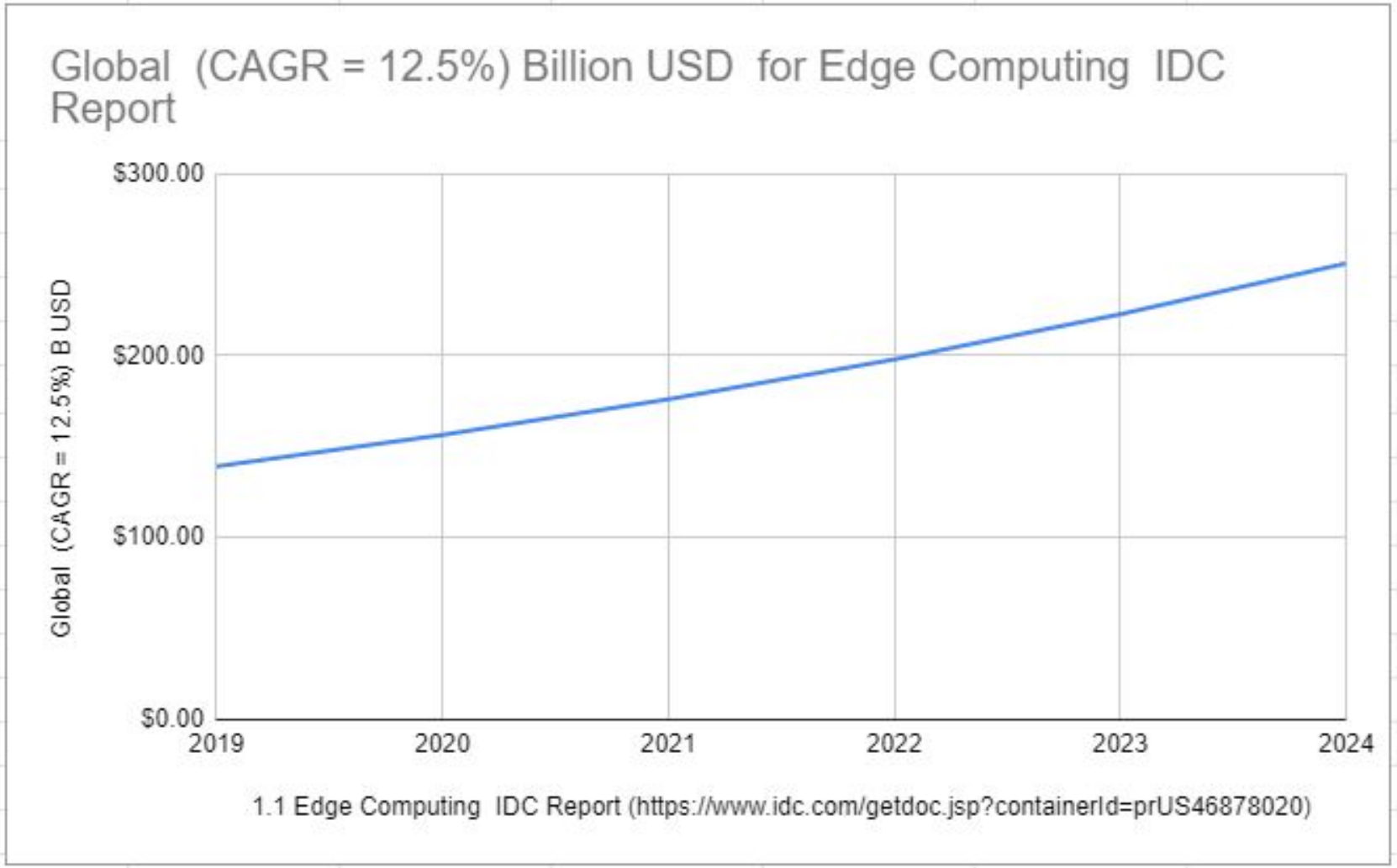
soda foundation

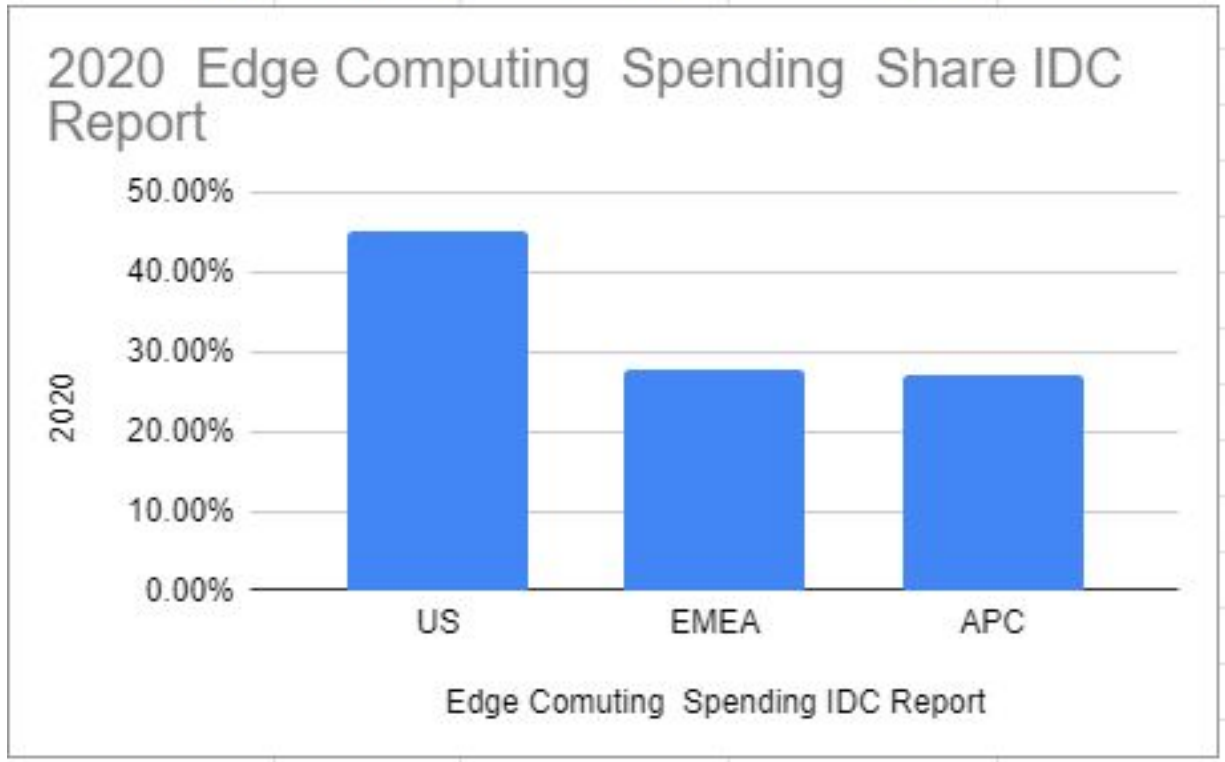
- Edge Spend is Growing and 75% will move from Cloud to Edge in 5 years

Edge Comuting IDC Report	Global (CAGR = 12.5%) B USD
2019	$139.05
2020	$156.43
2021	$175.99
2022	$197.98
2023	$222.73
2024	$250.60

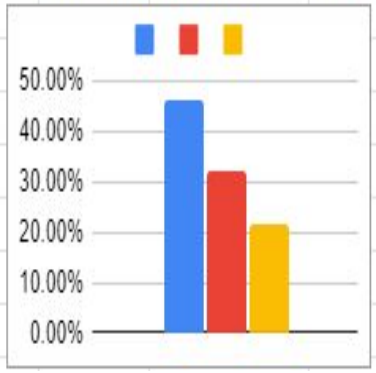


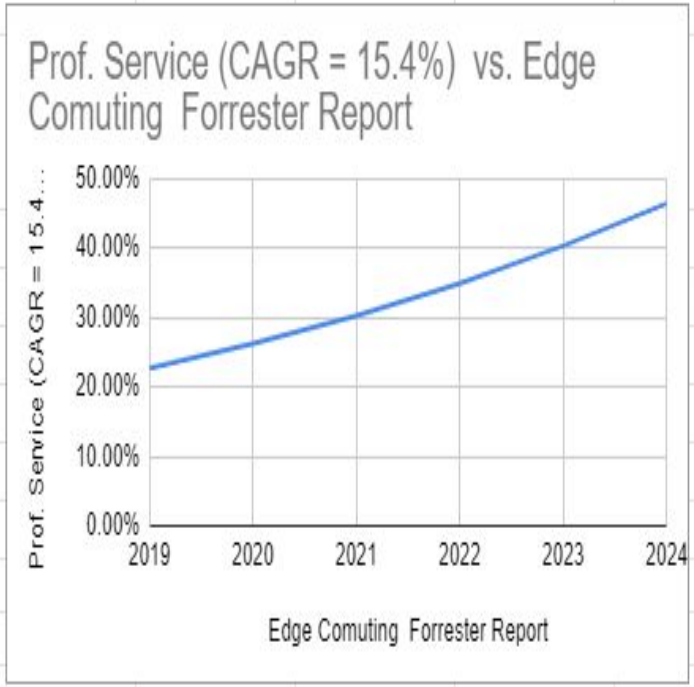
Spending by Geo and split by Domain(SW<HW<PS)

2020 Edge Computing Spending Share IDC	US	EMEA	APC
2020	45.00%	27.90%	27.20%

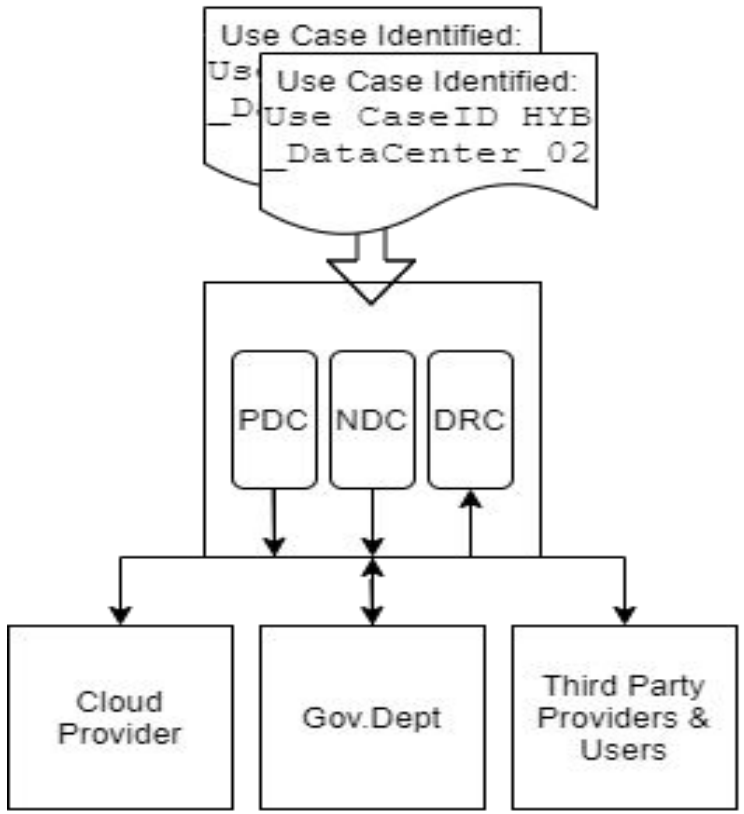


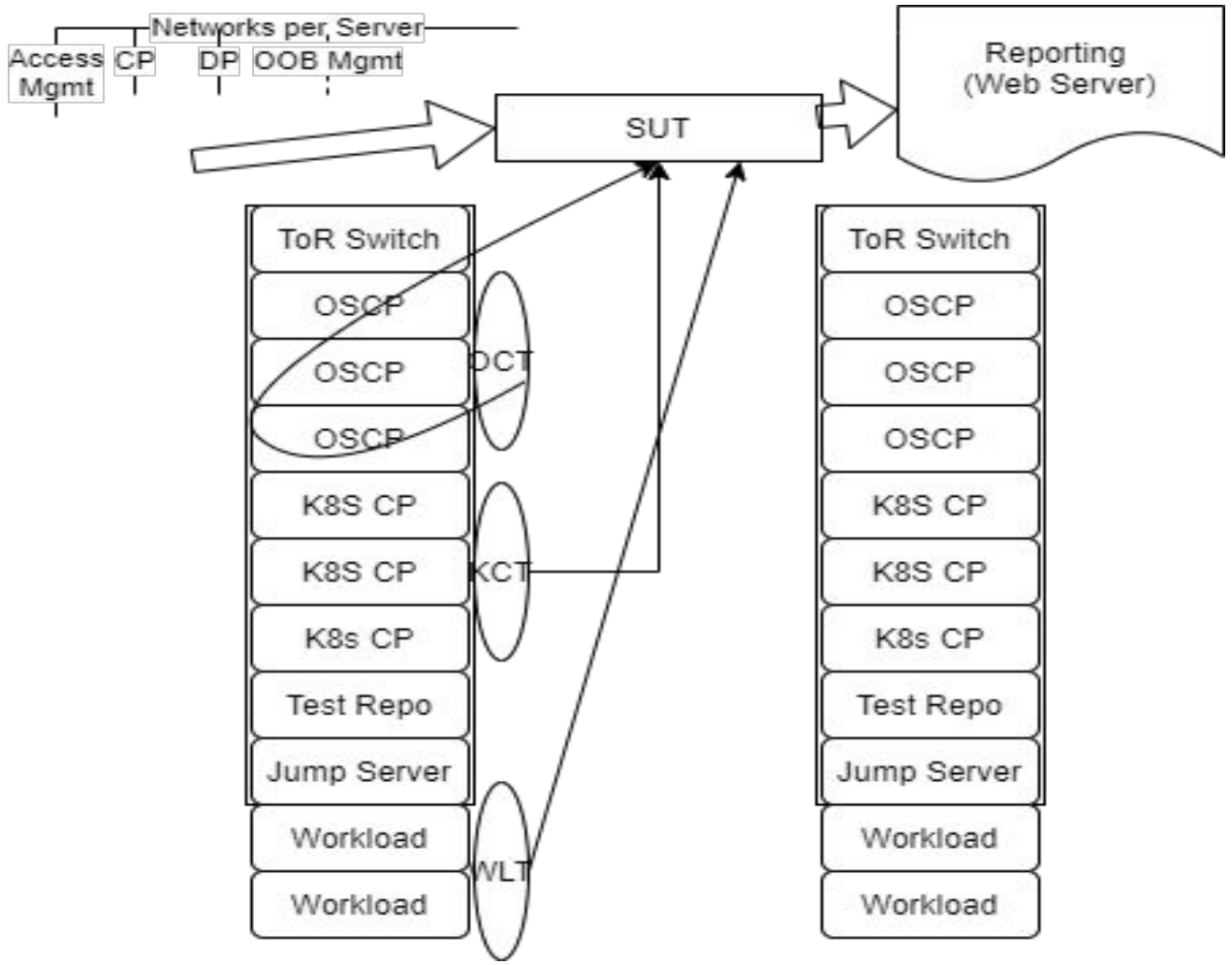
Edge Comuting Forrester Report	Prof. Service (CAGR = 15.4%)	Descrete Manufacturing Hardware	Retail Software
2019	22.73%		
2020	26.23%		
2021	30.27%		
2022	34.93%		
2023	40.31%		
2024	46.40%	32.20%	21.60%





CCICI Cloud Testbed beyond CIP 1.0





Where is the Edge?

Where : Anywhere between Client Device and Application Service except Cloud
Device - Access Gateway - Edge Workload - Edge CP - Cloud CP -Cloud Workload
UNI - NNI - NEI- EDGE- ECI- CLOUD (A simplified veiw of Interfaces)

What is Application Service? Edge as a Service[Composite Service - Sigma (Micro Service or FaaS) - Call it Edge Native Service (ENS) eg. AWS Lambda, Google Cloud Function,MS App Services, Oracle Edge Services - Most of these focus on DNS /Zones, Traffic Steering, Load Balancing , Security , ID Management, Endpoint Management and suit of tools for DevOps/CI/CD and App Developer Develop and use tools to Manage apps at the edge

All of this be On-Prem, Enterprise Edge or CSP Edge or **Travelling Edge or IoT Gateways** all focus on **SLA's and measure SLOs** with Telemetry & Event

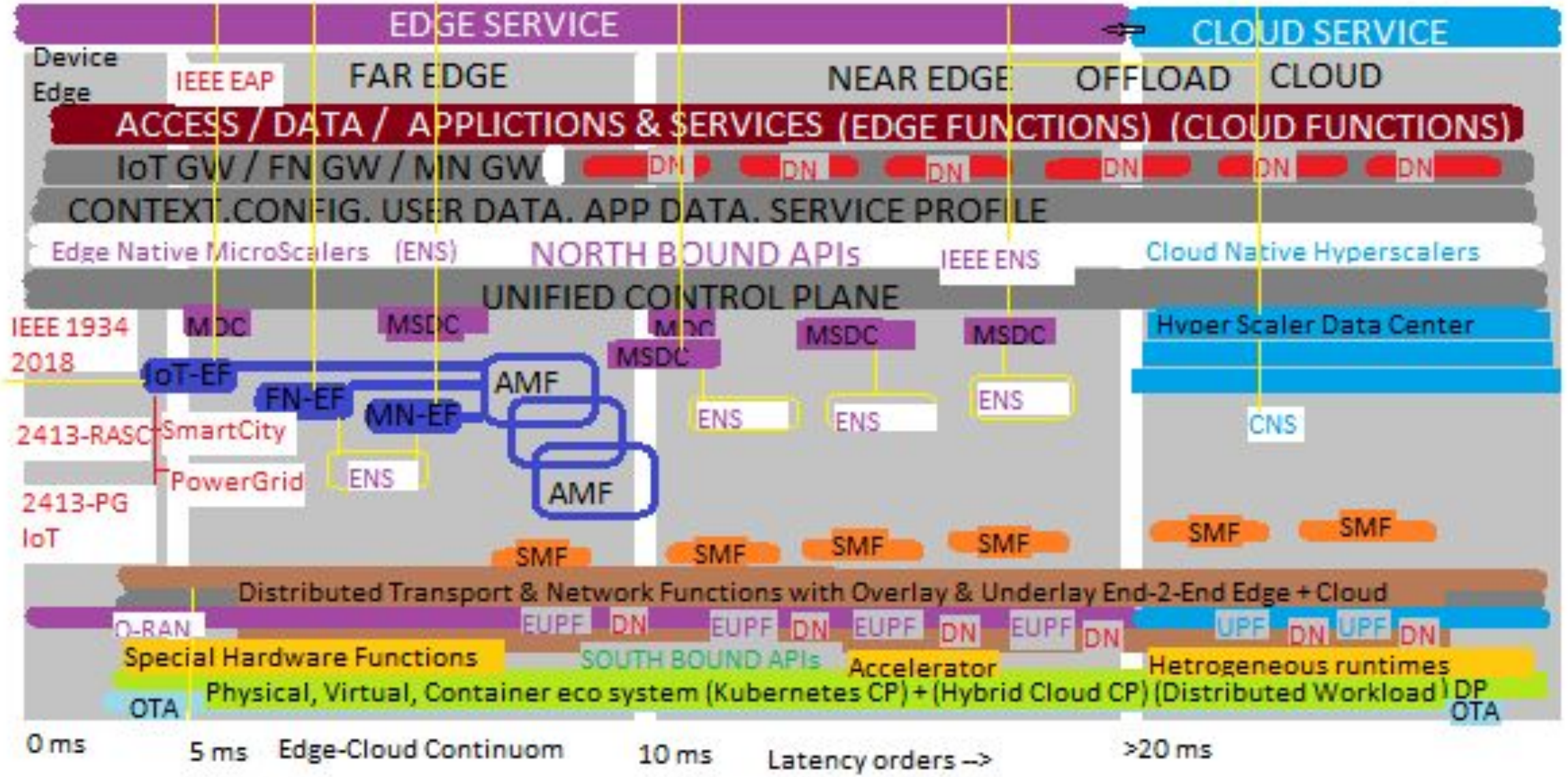
Where is the Data?

Where is DATA : At the Device Edge and At Enterprise Edge & Cloud

How do applications use Data? : Process Data closer to where they are produced :

1. Reduce Data Collection Latency due to Network delays
2. Accelerate Processing using Grid & Streaming Power of GPUs
3. Leverage Parallelism of repetitive calculations in Data Processing like Encode, Decode, Compress, Decompress, Transcode Media
4. Leverage pre-trained AI/ML for Inferencing and faster classifications
5. Partition Applications and Microservices to Optimize for Multiple Parameters
6. Leverage Managed Edge Clouds Security Tools and Best Practices

Edge Native Service



Question & Answers